THE MAGAZINE OF WALL STREET

SCIENTIFIC INVESTMENT FOR EVERYBODY

YOU and WALL STREET

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THE MAGAZINE OF WALL STREET

2 RECTOR STREET - - - - NEW YORK

VIEW IN WALL STREET

THE MAGAZINE OF WALL STREET
(FORMERLY THE TICKER AND INVESTMENT DIGEST)

DEVOTED TO SCIENTIFIC INVESTMENT.

Vol. 11 NOVEMBER, 1912 No. 1

You and Wall Street

Why Don't the Two of You Get Together?

IN the September issue we arose to make a few remarks about "You and Your Money." We want to go a step further now and discuss your personal relations to Wall Street.

You will notice that we put YOU first, not necessarily because you are more important than Wall Street, but because you are more important to yourself.

Perhaps you've read the story about the colored person at the battle of Shiloh who was hiding down behind the river bank. An officer rode up and urged him to go up front and fight. "Your life isn't worth any more than those other men's, is it?" he demanded.

"Wuff moah to me, sah," replied the darky.

The chief interest Wall Street has for you is as it affects your own personal affairs and prospects.

At this point you may say, and undoubtedly a few of our readers will say, "Humph! Wall Street is a bunch of thieves!"

If you say this, we will agree with you to this extent: There are thieves in the Wall Street district—also in all other districts that we ever heard of. Why, there is a business man right in your town—you know his name—who is next door to a thief, but just manages to keep inside the law and outside the jail.

However, you don't have to deal with the thieves in Wall Street any more than with the thieves in your own locality. You can easily have "friends in both places." All you have to do in either case is to *find out a man's reputation before you deal with him.*

"But what I mean is," you may reply, "the Wall Street system is based on thievery. The big fish eat the little ones."

Well, not exactly. Wall Street is a place where the little fish have an easy chance to commit suicide, and the big fish gobble up their remains. The little fish can navigate the waters (no joke intended) of Wall Street if he *knows how.*

We are not especially concerned in defending Wall Street. During the past five years we have tried to reflect faithfully all the activities of Wall Street, good and bad. The fact is that the term Wall Street is used in two widely different meanings. When Mr. Bryan denounces "Wall Street interests," the "Money Power," etc., he refers to those big financiers who, he believes, dominate the industries of the country.

It is no part of the business of this magazine to get into that argument. If you agree with Mr. Bryan, you are en-

titled to your opinion. We have our own views on the subject, but have no desire to force them upon a bored and yawning world.

The Wall Street we discuss is the Wall Street you deal with—your bond house, broker, banker, or trust company. And we want to say, as emphatically as we know how, that—

The standard of business honor maintained by the best Wall Street houses in dealing with their customers is higher than in any other line of business whatsoever.

We don't think this is because these men are naturally any more honest than other men; but the nature of their business is such, its safeguards and responsibilities are such, that dishonesty or trickery would be simply business and financial suicide.

The farmer puts the big apples on the top of the barrel. "Yard-wide" cloth is really 34 inches wide—it's a "trade custom." When your wife orders five pounds of fancy large prunes, she needs a gun, a bowie knife, and a pair of brass knuckles to prevent the grocer from delivering medium sized prunes instead. A widely advertised real estate auction was recently called off because it had rained and the lots were under water!

Yet you go on buying the same apples, cloth and prunes; and the probability is that some of your hard earned cash is "invested" right now in real estate lots that you couldn't sell for half what you paid for them.

But if a bank, trust company, bond house, or brokerage concern were to cheat its customers in such a way it would be dead before the doctor could get there to operate for appendicitis—and that's pretty quick. Truthfulness and financial responsibility are the first and most necessary requirements for success in those lines.

On the other side, the Wall Street dealer will not give you any opportunity to cheat him. Of course, you wouldn't do it, that's understood—but he will take no chances on you. He maintains his own high financial standing by insisting that his customers do the same.

So there is no reason why you and the Wall Street you have to deal with, should not get together on terms of that mutual confidence which results from mutual interests.

"The reason that young man will always wear a patch on the seat of his trousers," we heard an employer say one day, "is because he can't learn to discriminate."

You have got to learn to discriminate in Wall Street. You have got to get over that crude idea of lumping the "financial oligarchy," the Hocking Coal & Iron pool, the manipulation of Can common, fake mining promotions, etc., in with the business of reliable banking, bond and brokerage houses, and calling the whole thing "Wall Street." It's childish. You ought to be ashamed of yourself.

"Well," you say, "I *am* kind of ashamed of it." Being a reasonable being, you acknowledge the corn. "But," you ask, "what do you undertake to tell me I ought to do about it?"

Look here—you have some spare time, haven't you? And you are saving a little money, aren't you?

What are you doing with that spare time? Reading the newspapers? Playing cards? Going to the ball games? Sitting around talking and smoking? Going to the shows? Visiting friends or entertaining them?

Not a word to say against any of those things, but—*are they building up your future?* Will they give you a better income next year than you have this year? Will they safeguard the baby's future, send the girl to college, or help start the boy in business?

And about that money you save—how fast is it piling up? Fast enough to suit you? Are you fertilizing it and making it grow more money?

If you can take that spare time and that spare money and put the two together so as to *increase your income in geometrical progression,* aren't you a chump if you don't do it? We leave it to you.

"I'd be a still greater chump if I invested my savings in some wild-cat stock and lost them." We can almost hear you say that.

Correct. You may go to the head.

But you would be much less of a chump if you applied that spare time in

learning how to invest safely and profitably.

There is a definite limit to what you can earn—you know about what that limit is. But there is almost no limit to the amount you can accumulate by successful investment, *if you know enough.* The constantly growing list of American millionaires proves that.

Here is just where you and Wall Street ought to get together. The machinery is all here ready for your use. It is being successfully and profitably employed by many others. The machinery isn't perfect, but it is safe when intelligently handled. Why not learn to use it for your own benefit?

The time when thousands of dollars were needed to do business in Wall Street is gone, never to return. You can scarcely name a sum so small that it cannot be safely applied direct to an investment in stocks or bonds through reliable houses.

On the other hand, there is room enough for investment in the industries of America through the agency of Wall Street, of more millions than John D. Rockefeller will have if he lives to be a hundred and fifty.

Industrial Preferred Stocks vs. Common

Relative Merits of Preferred and Common Stocks

By HENRY HALL

Author of "How Money Is Made in Security Investments"

A LARGE majority of the prominent industrial American corporations and a legion of the obscure ones, which were created in and after 1896, were incorporated under the laws of New Jersey. New Jersey charters have been favored by financial underwriters, not because the laws of that State are lax, but because they have permitted corporations to enjoy broad and extensive powers, possession of which has been considered likely to facilitate their success. Some of these powers exist under the law itself, whether or not they are specifically referred to in their charters.

New Jersey requires, as is usual, the payment of cash for stock in a new corporation, but expressly makes real property receivable in lieu of, and as equivalent to, cash. I believe that this provision is in the laws of all the States. But New Jersey further declares that "the good will of a business is property, for which stock may be issued." Good will figured quite prominently in all the earlier consolidations of bitter rivals and independent companies into large corporations, rightfully so, because it is always essential to the success of a new corporation, that the proprietors of the original smaller companies shall not go off and set themselves up in business again, to the detriment of, and in opposition to, the new concern. Good will is a real thing, whose value has been proved by experience and can be expressed in and paid for with cash, if necessary, although it has commonly been paid for with stock.

Every one who had a hand in any of the industrial consolidations of 1896-1901 will remember what a herculean task it was, to reconcile differences of opinion as to the value of the different properties included in any proposed merger. Proprietors often quarreled for years, losing money all the time, and on the verge of bankruptcy, before all of them could be brought to agree upon the terms of a merger. And it was a distinct characteristic of that time, that every one who sold his factory to a "trust" or big corporation did so only upon the condition of payment therefor either in cash or in some form of security, whose full par value was represented by real property, and which therefore possessed genuine worth on that account. The financial world had so many disastrous experiences with the common

shares of struggling corporations, that no one who joined in a merger proposed to accept common stock in a new corporation as any part of the real consideration for his property.

Hence there came into existence this general plan, that, in mergers, the real properties, the factories, lands, goods and materials on hand, and every other species of tangible assets belonging to the subsidiary proprietors, were all paid for with preferred stock of the new corporations. The preferred shares represented the properties. They thus had distinct value. They were backed by genuine assets. They had earning power and voting power and were worth retention as investments. The great bulk of the preferred shares were stored away in the strong boxes of their primary owners, there to remain for an indefinite length of time.

That less tangible, although extremely real, element in a merger, the good will of the original proprietors, was paid for with common stock in the new concerns. As already suggested, no one had a very high idea of the value of common stocks in the early days of our big corporations, following the terrible depression of 1893-1896. The common shares of new concerns were, therefore, regarded as so much water in the capitalization, and if anybody could get anything out of the possession of them, he was welcome to. They were simply thrown in, as a makeweight, to help consummate the mergers. In practically all the announcements of the bankers, who financed the consolidations of ten to fifteen years ago, the common shares of industrial corporations were regarded from that point of view, not perhaps in specific language, but in substance. There were no tangible assets behind the common shares. The only value they possessed as securities grew out of voting power and speculative possibility of future earnings; and on this latter point, people were justified in entertaining doubts, as the bankers did also, in many cases.

Out of this state of facts grew the circumstance that, in all the early mergers, almost without exception, and even in the case of U. S. Steel, created in 1901, the owners of the original properties *retained the preferred shares of the new corporations and sold the common shares* for what they could get for them. Proceeds of the common shares were virtually a bonus to the owners of the absorbed properties. It is stock market history, that James R. Keene was employed in 1901 to get rid of a vast amount of the common shares of U. S. Steel, which the owners did not want to keep, and he conducted a remarkable and successful campaign with that object in view. Lesser lights in the field of manipulation performed the same valuable service for the common stockholders of many others of those old time mergers; and a successful exploit, in getting rid of the common shares, was a cause for glee among the original proprietors.

A good deal of financial history has been made, however, in the last fifteen years. The once despised common shares of some of the industrial corporations have, during this period, gradually come to earn anywhere from 8 to 20 per cent. a year, and to pay dividends large enough to yield an income much superior to that produced by the preferred shares. Any one who bought U. S. Steel common below 40, and is now deriving 8 per cent. income thereon, is certainly in a better position, financially, than anyone who paid par or more for Steel preferred, and is getting an income yield of 7 per cent. or less. Anyone who bought American Beet Sugar common below 50, and is now receiving 5 per cent. a year dividends, that is to say, a 10 per cent. income, from the stock, can certainly say "Tra, la, la" to the owners of the preferred shares, who are limited to 6 per cent. dividends, and who cannot be drawing more than about a 7½ per cent. income from the stock, even if that. There are numerous instances of the now exalted state of these common stocks, which were originally all water and whose manipulated market value in booms was formerly regarded as purely fictitious. American Snuff common is an example of a few once non-paying and almost discredited common shares, which are actually receiving larger disbursements than the preferred shares. American Snuff common received nothing in 1900-1902, but went on a 10 per cent. basis in 1903 (against the 6 per cent. of the preferred stock), and has never since re-

ceived less than $10 a year, and in 1911 received $29 in cash dividends.

In addition to this feature of the case, there is another one in the great difference in appreciation in market value, which has taken place respectively in the common and in the preferred shares. The finest profits, made in the stock market by long pull and hard headed people, especially by those who do not depend for their support upon any particular bunch of securities which they may own, are derived from common stocks, which do not pay a dividend, and are selling low in price in consequence thereof, but which enjoy the prospect of being raised to the rank of dividend payers, a few years ahead, and which do, in fact, attain to that distinction.

U. S. Steel common sold at 8⅜ dollars a share in 1904, during that brief interregnum in 1904-1905 when dividends were suspended, and in 1909, sold at 94⅞, as a 4 per cent. stock, which everyone knew was soon to become a 5 per cent issue. That was an advance of 86½ dollars a share in price. U. S. Steel preferred, a solid investment security, which represented all the tangible assets there were in the merger in 1901, has never had any rise equal to that.

American Smelting common sold at 36¾ in the panic of 1903, a non-dividend payer up to that time, and soared to 174 in 1906 as a 7 per cent. stock, an advance of 137¼ dollars a share. The extreme range of price of Smelting preferred in its whole history has never been more than 49¾ dollars a share.

American Beet Sugar common, which had never had a dividend and was originally, under its New Jersey charter, water, pure and simple, sold at 9½ in 1908; and as a 5 per cent. stock (and earning far more than that) has recently sold at 77, a rise of 67½ dollars a share, while the extreme range in price of the preferred shares from panic bottoms to tops of the booms has never been greater than 38¼ a share.

American Snuff common sold at 30 in 1901, then supplying no income, but two years later was drawing 10 per cent. (against 6 per cent. for the preferred), and in 1905 rose to $250 a share, the preferred selling at only 110. The stock has attained higher flights since.

The same phenomenon is visible in railroad shares, as witness the rise in Reading common, from 38¾ in 1904, then having no investment value, to 164 in 1906, as a 4 per cent. stock, an advance of 125¼ dollars a share. Reading has since sold at 179¼. This incident is cited merely as confirmatory of the general fact, that the best speculative profits in the stock market accrue from the possession of some non-dividend paying shares, which are on their way to rank as, and which eventually do become, income producers and investment issues.

Is it to be supposed that this interesting and suggestive lesson has been wasted upon the organizers of modern industrial corporations? It certainly has not been. The plan of organization of our new mergers of manufacturing and producing companies is, therefore, radically different from the old in two striking particulars, and the conduct of the proprietors and financial backers with reference to the shares is different.

In the first place, every effort is made to give the preferred shares of our modern industrial corporations a more than commonly solid investment value from the very start, *in the eyes of the public.* No time is spent in expatiating upon their merits to the proprietors of the subsidiary companies.

Take the case of Emerson-Brantingham, as an example, a company which is a merger of several agricultural implement manufacturers, with large plants in six cities in the West and a large and growing business. The company is now one of the principal concerns of its class in the United States. The preferred shares of Emerson-Brantingham are of the usual 7 per cent. cumulative description; but it has been arranged that $200,000 a year is to be set aside as a sinking fund for retirement of preferred shares, whenever they can be bought at 115 or less, and in case of dissolution of the company the preferred stock is to receive $115 a share and all arrears of dividends, if there are any. Farther, the company reserves the right, at any time, when so disposed, to retire the whole preferred issue at $115 a share and dividends. As for the assets upon which the preferred issue is based, they amount (less current liabilities) to $17,368,000, where-

as the total preferred stock outstanding amounts only to $12,000,000. There is no necessity of going into details of the margin of safety for the preferred dividend. That margin exists and is a large one. No mortgage can be placed upon the properties, without the consent of 75 per cent. of the preferred stock.

Many of the new corporations have been organized with provisions similar to those above described; and they set a stamp upon preferred shares, which was not enjoyed by any of the old style of industrial corporations, or at the most by more than an extremely few of them. The object is to give the preferred shares a solid valuation in the eyes of the public from the moment they are placed upon the market, and to commend them to that vast army of solid, conservative investors to whom speculation does not appeal, and who are not looking for speculative profits upon their securities. Loose-Wiles Biscuit, F. W. Woolworth Co., California Petroleum, and various other new corporations have been created upon this principle. The preferred shares are fully represented by tangible assets. A redemption price for them is usually fixed, in excess of par value; a sinking fund for retirement of the stock is arranged for, and total issue of the preferred is so limited in amount that there is a large margin of safety for the dividend. In view of the great privileges and value given to the preferred shares, and the immense amount of security back of them, some of them have no voting power, entire control of the corporation remaining with the common stock, except in one respect: No mortgage can be executed without the consent of the preferred stock.

The second peculiarity of the modern industrial corporation is, that the capitalization is so arranged that from the moment the common shares are created they also represent tangible assets to a certain extent. They do not represent an abstract idea (good will). They do not have to wait, as in the case of U. S. Steel, American Car & Foundry and others of the old style concerns, for the gradual turning back of millions of earnings into the properties, in the slow course of years, until finally the book value of the common stock becomes something to talk about. They have some value upon the very threshold of their careers. If, for instance, one of these new corporations should be liquidated and dissolved, comparatively soon after its incorporation, the common shares might receive half their par value in cash, something definite at any rate. The capitalization is arranged with this idea in view. And further, by reason of this moderation in total capitalization, the common stock has earning power from the very beginning. It may not receive a dividend until a proper amount of working capital has been accumulated. It usually does not. But the company has the power to pay one when the directors, in their discretion, deem that expedient.

In other words, to come finally to the point, when an industrial corporation is organized on modern lines, a large proportion of its preferred shares are not hoarded. They are sold at once to institutions and the public, as solid, sound and safe investments, whose dividends are practically guaranteed and whose income yield is fully up to the requirements of the times. On the other hand, the insiders and financial backers of the corporation *retain a large amount of the common shares* for a time, because of expected earning power and speculative possibilities. This is exactly the reverse of the old policy.

Consider what is likely to happen, for instance, to M. Rumely Co. common, selling at this writing around 90, earning 16 per cent., and able easily to pay 7 or 8, when a dividend is finally declared. Or consider Emerson-Brantingham common earning about 12 per cent., soon to go on a 5 per cent. basis (so the officers assert) and with good times probably equal to paying much more than that. What would happen to the market value of the stock in that case? Or, take Loose-Wiles Biscuit common as an example, which has been selling for less than 45, a stock which can pay in time perhaps 6 per cent. I make no predictions here as to what any one of these modern common stocks will do, when they go upon a dividend basis, or when dividends will be declared. It is not in the least necessary for me to do more than refer to the fact that, when the promoters and original proprietors of a modern corporation retain the bulk of the common stock for

themselves, a powerful incentive exists to place it upon a dividend basis, as soon as possible; and stock market history is eloquent as to what happens to market values in such cases.

It must not be supposed for a moment from this statement of facts, that modern corporations are planned and managed solely with an eye to speculative profits upon their shares, upon the part of insiders, any more than the old ones were. They are all thoroughly sound, practical, going concerns, engaged in laudable business pursuits, and operated upon a scientific basis for profits to their owners, and are upon a perfect parity in that respect with the old style of corporation. And, indeed, I am in a position to say that these new industrial mergers are never planned and floated, without the most exhaustive and searching investigation of the books by the bankers, who are responsible for the financing; without a rigid examination and appraisal of all the properties; and without such other scrutiny of all pertinent facts, as will justify the bankers in offering the preferred shares to the public, as safe and conservative investments. But, all the same, facts are facts. There is a difference in market fluctuations between a sound, steady going, quiet investment preferred stock and the more mercurial common shares. If insiders choose to hold the common shares for a rise, certainly the preferred stockholders cannot object, because they have been given a security of positive intrinsic worth and assured ability as an income producer.

It is to be noted that the trend of sentiment in the financial world no longer inclines, as unanimously as aforetime, in favor of a New Jersey charter. New Jersey charters are as good as ever they were; but the laws of other States have their good points also, and there are rather more new charters of the million-dollar class taken out in Delaware now than in any other one State in the East. But this is another story.

Forecasting Business Conditions

By LAWRENCE CHAMBERLAIN

Author of "The Principles of Bond Investment" and "The Work of the Bond Houses"

Part I—The Purpose, the Materials, and the Method

CHAPTER II—THE MATERIALS IN MISCELLANY.

IN the previous chapter, which was devoted to the purpose, or purposes, that induce us to study business conditions, I strove to show that the incentive, the subject matter, and the method could find many analogies in other fields of scientific endeavor. This is particularly true of the subject matter. If the first step is to set up for ourselves an objective to strive for, the second is to gather the materials for study. In common with every other science we find that almost every conceivable phenomenon has some bearing on our purpose; in common with every other science, for success we must resolutely undertake, from the inchoate mass of material, to select groups of related phenomena that most immediately assist our purpose, and to discard the remainder—not as valueless in itself, but as confusing to our minds with their limited capacity for absorption. Great science, like great art, seizes the essential and ignores the accidental.

I believe, therefore, that one of the natural, but most serious faults of certain "systems" of forecasting business conditions is that they are too comprehensive. In their attempt to be comprehensive they fail to be *sensitive*. Furthermore, it is an accepted statistical principle that *abnormal* factors must be eliminated to arrive at a true average. Selection then is necessary in the interest of accuracy as well as of sensitiveness.

But selection is necessary not only as to the great groups of phenomena to come under our observation, but also as to the constituent parts of each group, and in the frequency with which we test recurring phenomena, in even the methods of observing different sets of phenomena. Repeatedly, in these papers, particularly in the papers on Method, we shall be obliged to defend our selection of materials, time of observation, and method.

Perhaps these remarks will be clearer by illustration. If a physician is called to diagnose a disease he will not usually set to work to create vast sets of tables regarding the patient's ancestry, previous disorders, and various occupations since childhood, etc., etc., although every one of these influences must, of necessity, have some bearing on the ailment. But the physician will, if the case be serious, order a most minute record kept of temperature, pulse, respiration and other like symtoms that bear immediately on the present situation. He is perfectly aware that relatively obscure and indirect influences if ascertainable and presentable in the right light, would help him somewhat in his effort to make the sick man well; but after all, too much detailed information of the circumstances would merely clutter up the mind of the diagnostician, which must be kept sufficiently free of trivialities to help his *sense* of trouble and the remedy.

So it is in diagnosing economic ailments. To do the best work a layman must not burden himself with semi-relevant detail, but choose a few fundamental groups of facts, and accept for mental *mulling* a succinct, digested summary of what is significant in each group. Otherwise he will never see the woods because of the trees.

If one carries the idea of the casual relation too far it will bring him to all sorts of absurdities. It may be that anything which ever happens has been caused by a combination of everything that ever happened, but one doesn't get anywhere from a knowledge of the fact. So far as we know, the law of gravitation means that every atom in the universe is pulling toward itself every other atom. But we should hate to see this principle of physics brought in to explain a head-on collision of railway trains, albeit the force was working just the same.

The futility of over-much *computation* of figures by the layman, in studying fundamental conditions, also cannot be urged too strongly. The mental effort of grappling mathematical principles tends to obscure the significance of the figures.

From the myriad phenomena that have bearing on business conditions it is no light task to choose and organize the *minimum* number of sets of groups of related facts sufficient for the purpose. No two students will agree in all particulars as to the groups to be chosen, or the facts that should constitute each group, or perhaps even the relation of one group to another; but there is surprising consensus among professional systems of reporting these conditions as to what is really essential for study.

There are in the United States three such systems which have been serving business houses a sufficient length of time, and to which the number of subscribers is sufficiently large to compel a respectful hearing. I present here the materials on which these systems are based exactly as published, or furnished me, by the proprietors.

SYSTEM I.

Expansion and Contraction of Credits (Loans and Deposits) and their Relation to Security Values.

Composite Chart of Fundamental Conditions and Security Prices.

Fundamental and Technical Conditions—Influence and Limitations.

Statements of New York Associated Banks: Reserves to Deposits. Deposits. Specie.

Statements of New York Associated Banks: Loans to Deposits.

Condition of National Banks from 1885 to date Loans to Deposits. Deposits. Specie.

Condition of National Banks from 1885 to date. Loans and Discounts. Specie to Loans. Circulation.

European Bank Rates. England. Germany. France. Average.

Range of Call Money and Commercial Paper. 1879 to 1910. New York.

18-Year Average of Call and Commercial Loans. New York.

Bank Clearings in the United States.

Total Clearings. Clearings outside of New York.

Percentage of Outside Clearings to Total.

Yearly and Monthly Record of Failures in the United States.

Crop Statistics. Influence of the Crops.

Gross and Net Earnings of 10 leading railroads and Percentage of Net to Gross.

Average Yield on Market Price and Average Dividend of 10 Leading Railroads.
Shortage or Surplus of Cars in United States.
21-year Average Price of 20 Railroad Stocks.
11-Year Average Deposits, Percentage of Loans to Deposits. Interest Rates.
Weekly Movements in Stock Market.
Stock Market Cycle. 1885 to date.
Table of Seasonal Movements.
Average Market Price of 20 Railroad and 12 Industrial Stocks and 5 Standard Bonds.
Yearly Stock Market. Number of Sales. Bank Statement. Clearings. Railway Earnings. Gold Movements. Crop Conditions. Crop Production and Exports. Imports and Exports arranged chronologically, 1895 to 1911.
Merchandise. United States Imports and Exports.
Gold. United States Imports and Exports.
Building Operations. 25 Leading Cities 1902 to date.
United States Immigration and Emigration.
Bradstreet's Price Index for 96 Commodities.
Monthly Production, Consumption, Prices and Stocks in Hand in the United States 1909 to date.
Monthly Production. Prices No. 2 Pig Iron. Chicago, 1887 to date, with stock market prices.
New York Stock Market Record. Value to Active Investors or Speculators.

SYSTEM II.

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    Average Money Reserve (by months) of New York Associated Banks.
    Actual Money Reserve (five times a year) of All National Banks.
    Deposits (New York Associated Banks), Average Net Deposits by Months.
    Total Money in Circulation in the United States.
    Stock of Gold Money in the United States.
  Credit:
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    Loans to Deposits, All National Banks.
    Loans and Discounts, All National Banks.
    Reserve to Deposits, New York Associated Banks.
    Reserve to Deposits, All National Banks.
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    Commercial Paper Rate at New York, by Months.
    Six Months Money at New York, by Months.
    Three Months Money at New York, by Months.
    Call Money Rate at the New York Stock Exchange, by months.
    Sight Rate of Sterling Exchange, by Months.
B. Investment.
  Prices of Ten Standard Railroad Bonds at New York.
  Prices of Ten Standard Railroad Stocks at New York.
  Prices of Ten Standard Industrial Stocks at New York.
  New York Clearings.
  Total United States Clearings.
C. Business.
  Production of Pig Iron by Months.
  Price of Pig Iron by Months.
  Value of Pig Iron by Months.
  Bradstreet's Index Number for 96 Commodities, by Months.
  Actual Clearings by Months, outside New York.
  Actual Number of Commercial Failures, by Months.
  Gross Earnings, All Railroads of the United States.
  Net Earnings, All Railroads of the United States.
  Maintenance Expenses, All Railroads of the United States.
  Ratio of Net Earnings to Gross, All Railroads.
  Ratio of Maintenance to Gross, All Railroads.
  Value of Merchandise Imports.
  Value of Merchandise Exports.
D. Statistical Record (Actual, not percentile figures).
  Railroad Bonds.
  Railroad Stocks.
  Industrial Stocks.
  Sight Sterling Exchange.
  Bank of England Discount Rate.
  Reserves, New York Associated Banks.
  Deposits, New York Associated Banks.
  Loans and Discounts, New York Associated Banks.
  Loans to Deposits, New York Associated Banks.
  Commercial Paper at New York.
  Six Months Loans at New York.
  Three Months Loans at New York.
  Call Loans at New York.
  New York Clearings.
  Corn, No. 2 Mixed, at New York.
  Wheat, No. 2 Red, at New York.
  Cotton, Middling Uplands, at New York.
  Southern No. 2 Foundry Pig Iron at New York.
  Lake Copper at New York.
  "Outside Clearings."
  Total U. S. Clearings.
  Production of Pig Iron.
  Gross Earnings, all Railroads.
  Operating Expenses, all Railroads.
  Maintenance, all Railroads.
  Net Earnings, all Railroads.
  Dun's Number of Failures.
  Bradstreet's Number of Failures.
  Dun's Liabilities of Failures.
  Bradstreet's Liabilities of Failures.
  Bradstreet's Commodity Prices.
  Total Money in Circulation in the U. S.
  Total Stock of Gold Money in the U. S.
  Total Stock of Money in the U. S.
  London Economist Index Number of Commodity Prices.
  Imports of Merchandise. Value.
  Exports of Merchandise. Value.
  Balance of Merchandise Exchange.

SYSTEM III.

I. Building and Real Estate: Including

all New York Building and Fire Losses.

II. Bank Clearings: Total Bank Clearings. Bank Clearings excluding New York.

III. Business Failures: Failures, by number, amount and percentage.

IV. Labor Conditions: Immigration Figures.

V. Money Conditions: Money in Circulation.

Comptroller's Reports. Loans of the Banks.

Cash held by the Banks. Deposits of Banks.

Surplus Reserve of Banks.

VI. Foreign Trade: Imports, Exports, Balance of Trade.

VII. Gold Movements: Gold Exports and Imports.

Domestic and Foreign Exchange, and Money Rates.

VIII. Commodity Prices: Production of Gold. Commodity Prices.

IX. Investment Market: Stock Exchange Transactions. New Securities.

X. Condition of Crops: Crop Conditions and other Commodity Production.

XI. Railroad Earnings: Gross and Net Earnings. Idle Car Figures. Miscellaneous.

XII. Social Conditions: Political Factors.

A comparison of the materials that are the basis of these three systems leads to the conclusion that either there is virtual agreement as to the most significant facts, or else two of the systems feel free to imitate or borrow from the third. There is no point in pressing the matter, even if one could tell, for it is of little consequence to the outsider. In the interest of individuality and initiative any one of the three undoubtedly would be glad to discover significant facts overlooked by the others, or, less eagerly perhaps, would be glad to discard, as insignificant, phenomena now accepted by the others.

I do not at this stage in the discussion invite a careful examination of the individual facts presented by these systems, but merely a comparison of the three sets, as such, for likenesses and differences, in order that some confidence in the reader may be won for the material which at present is the basis of the study of business conditions.

In calling attention to these differences, which only bring out into relief the essential likeness, I have, of course, gone back of the assembled topics to the explanatory texts published in book form or otherwise by the Systems. But let it be said here, that there *are* fundamental differences in these systems, only they concern methods and results, not materials.

To return, then, to the materials, the most radical discrepancy, I think is concerning the importance of crops. System I (called hereafter I) gives the most weight of the three, to crops. II does not chart or discuss crops or give the volume, but in its compiled records presents current and comparative prices of standard grades of the three great staples: corn, wheat and cotton. III claims a lessened importance to crop figures, since so much other material has become the subject of intensive study.

It seems to me that the past four months have been a very effective object lesson of the importance of keeping in touch with crop conditions, for in the face of distinctly threatening monetary conditions, the country has recovered, at least for a time, from its despondency of the past three years to renewed confidence and activity. Crops, and nothing but crops, have been the cause of this change.

The systems may well learn from the "business man" what a potent influence is being somewhat neglected. It is not as if figures were unobtainable. Besides private reporting bureaus employed by dealers and brokers in commodities, the Federal Government issues forecasts that are not to be despised. I cannot believe that a proper analysis not only of the volume of crop production (which affects railroad earnings and our foreign balances), but of what perhaps is equally important, the acreage (which in large measure determines the capital committee to agriculture) will be less important than the study of any other material in the whole category. Or else this year is no criterion.

Monetary conditions are given foremost place in all the systems, and with undoubted right. It will be noted that there is virtual unanimity as to what phases of money and banking deserve record. In illustration, the figures for New York Associated Banks and for "outside" (that is extra-New York) banks are separately stated. The same is true of clearings. It is a necessary recognition of New York's peculiar position as the commercial and financial

center of America. But it is more than this recognition. It is the result of comparison of the results of New York figures, and of "outside" figures with other figures of business condition as a check. In some cases (e. g., reserves) New York figures are the more significant; in others (e. g., clearings) outside figures are best; in others (e. g., loans to deposits) New York and outside combined are needed.

As to indications of commercial activity (apart from clearings, already mentioned) I gives some attention to new building in a limited number of cities, II entirely ignores the subject, and III makes a good deal of it, and tries to check up the gross advance with consequent increase of wealth, by fire losses, growth in building operations, inaccurately evidenced by construction permits, etc. As an *effect* of past changes the material may serve some purpose. As a force causing changes, it is debatable whether the material has been worked up, or can be worked up to a point of usefulness that makes the trouble worth while.

Another index of commercial activity, infinitely more reliable in its figures and more significant as a force, is that of railroad earnings. I—gives a moderate amount of attention to these earnings and to idle car figures; also considerable to the nearly unrelated matter of the yield of railway securities. II—elaborately analyzes railroad earnings and charges, merely states idle car figures and overlooks security yield. III—analyzes earnings, but with less minuteness than II, and neglects security yield.

Indications of business activity in transfer of money and liquid credit are expressed in clearings; in security transfer are expressed in the monthly and yearly volume of stock and bond sales on the New York Stock Exchange. I gives the figures, II does not, III does, and also the amount of new securities listed. Whether statistics of security transfer are worth while will depend entirely on whether any relation can be made to appear between them and the general flow and ebb of commercial welfare.

Indications of commercial activity or quietude may possibly be expressed in figures of United States Immigration and emigration. I and III present figures, II does not. Again in these figures the burden of proof of value is on those who exhibit.

All three systems consider business failures. I has a yearly and monthly record of their number, II emphasizes the number in chart form and gives the amount of liabilities in its Statistical Record, III presents not only the number and amount, but also the percentage of failures to solvencies.

It is notable that in tabulating and charting prices no attempt is made to deal with municipal and state issues, which form such a large part of our general indebtedness. The apparent reason is that very few issues of these kinds are listed, but accurate and significant price levels over a period of years can be established. It is only necessary to record the average basis price received by a state or city at public sale. The question in regard to these issues is merely whether the significance that can be established has sufficient bearing on the course of business conditions to warrant its intrusion when brevity is so much to be desired.

At least two of the systems seek brevity by means of "composite" charts that sum up in percentile figures the present state of a group of related facts. All banking conditions can thus be summed up to especial advantage, to be compared, for instance, with crop, mercantile or investment conditions, because of the great accuracy and variety of bank figures, and the frequency with which many of them are published. The great danger in the use of composite figures is their liability to "average away" significant tendencies.

These remarks are not intended by any means to cover the material presented, but merely to bring some little order out of chaos until in the next paper we can construct a defensible system of business conditions by analyzing and classifying this material, so that the story it has to tell may be easily read and the knowledge employed for profit.

BOND DEPARTMENT

What an Investor Ought to Know

The General Structure of a Corporation's Annual Statement

By FREDERICK LOWNHAUPT

[Under the above caption it is intended to present a series of articles treating many of the fundamental facts that are either never learned by many investors or apparently overlooked in the purchase of investments. Discriminating selection is no easy matter. Without a knowledge of the basic principles underlying the science of investment rational selection is impossible. The aim of these articles will be to give many facts in readable form—facts which in themselves are technical, but which, coordinated, explained and placed in proper relation to each other, are both interesting and easily understood. The subject discussed in the October issue was "The Relation Between the Company's Report and the Safety of His Investment."]

IN a previous article the relation between the annual statement of a corporation and the safety of an investment in that company's securities was discussed. The burden of that discussion rested upon the fact that the average investor neglects almost entirely personal consideration of the annual statement of the corporation in whose securities he has invested, either through indifference or because of the mistaken notion that the report is too technical and cannot be understood by the layman.

It was argued that the average corporation report can be understood in its essentials with only a moderate amount of study and only a general knowledge of the fundamental things that enter into its make-up.

There is much more to a railroad report than to the average industrial corporation report inasmuch as many statistical compilations of traffic are presented to the stockholders. There is a greater degree of uniformity in railroad reports also, which is a development of the last five years only. Before that time there was a similarity but there was a noticeable absence of vital information in many instances. In 1907 the railroads began reporting to the Interstate Commerce Commission in prescribed form so that the data became available in uniform shape. The railroads are required to report to the Interstate Commerce Commission in certain ways on certain blanks prepared by the Commission, not only every month, but at the end of their fiscal year, when the figures are presented in their final and adjusted form. These figures are then presented substantially the same in the stockholders report, although there is no requirement that the stockholders shall have the same wealth of detail that the Commission requires.

It is easier for the road simply to reprint most of the data presented to the Commission than to make up its figures in some different and obscure or abbreviated form. Hence the stockholder has profited greatly since the roads have been compelled to report in this fashion to Washington. It should be stated, however, that the average stockholders' report contains not more than two-thirds of the data presented to the Commission. There is much valuable information given the Commission that never appears in the annual report, but it may be obtained for the asking.

Not so with industrial corporations. The time has not yet come when they, too, are reporting in the fullest detail to the Commission. There is a measure of publicity to their affairs but this is only known to the government for the purposes of income tax. At the time the tax was inaugurated through a law a great hue and cry went up from the corporations for fear the statements presented to the government would become public property. It was later provided, however, that the public should not have access to these statements.

The annual reports of industrial corporations are not models of explicitness by any means. Heretofore the excuse has been that to give much information would be to disclose trade secrets to competitors. Consequently the stockholders suffered for want of information. A conspicuous exception has always been the United States Steel Corporation. The corporation has always given the most voluminous information.

The difference between a comprehensive industrial report and its opposite may be well represented in the difference between the United States Steel Corporation report and that of, say, the American Linseed Company. The first report gives an income account, surplus account, comparative income account, maintenance tables, tables of net profits for periods, tables of sinking funds, depreciation and replacement funds, depreciation tables, tables showing bonds held in sinking funds, tabulation of debt, balance sheet, tables of inventories, production, capital expenditures, description of the properties, volume of business, number of employees and amount of payrolls of various properties, expenditures for additional property, several pages of general remarks along with various other tables and descriptive information of many other aspects of the business—altogether a document of fifty-five large pages.

The American Linseed Company, on the other hand, gets up a report that may be put into a vest pocket, a report of about six pages of two hundred and twenty-five words each, a balance sheet containing five items on the liabilities side and ten on the assets side, an income account of one item, and a surplus account of two items—all of which may be read in less than five minutes. And this to cover the operations of a company whose plant is valued at over $31,000,000, and which is understood to be doing about 80 per cent. of the linseed oil business of the whole country. It may be argued that one does a business of over $100,000,000 with profits of about half that amount and is a business of many ramifications, while the other is like a small brother, with net profits far under $1,000,000. This does not help the stockholder who owns shares in the Linseed Company to know what is going on in his company.

Whether or not the great detail of the Steel Corporation report should be presented in every industrial corporation report is a matter on which no doubt people might differ. At any rate, there should be a vast improvement in the great majority of industrial reports. There is quite as much room for improvement in the reports of many miscellaneous corporations. Likewise in the statements of public utility corporations. Many of these latter report to the various State commissions, but provide very meagre reports or none at all for the public.

The investor should look for the income account in his report. The title of this account indicates what it presents. The railroad income account is divided up into various items showing just where the various amounts of income came from. Under the Interstate Commerce Commission's orders the income account of a railroad has become the acme of simplicity. Twenty years ago that could not be said. It was then something of a science to discover in just what condition a railroad happened to be. In fact, one or two of our eminent persons in the financial world today obtained their impetus in the business world about that time through their ability to pass accurate judgment upon railroad securities as a result of critical analysis of the properties.

There are a few minor variations of income account in several reports, although the prescribed form is followed very faithfully through these generally. Subsequently we shall study this account in greater detail.

It is in the industrial reports that the form of income account shows the great-

est variation. In some there is a tabulation beginning with the gross amount of income received during the year, while in others this figure is omitted and the account is begun by stating how much profit was made during the period. An income table of completeness and clarity begins with the gross amount of income. In railroad reporting there is no particular reason that could be advanced as to why these gross figures should not be stated. In industrial reporting the contention has always been made in many cases that to disclose the gross amount of income received would be to disclose how much it cost to operate the plant, for immediately following the gross amount of income received comes the cost of operating the plant. This has been a point jealously guarded by many from time immemorial. This argument is almost vitiated today. Under the governmental solicitude for the welfare of industrial corporations when competing legitimately there is a constantly diminishing fear of the effects of allowing the other man to know the cost of operating.

As has already been suggested by citing the difference between two extremes of industrial reporting there is such a thing as a real income account giving the fullest information, and there is such a thing as a mere apology for such an account in the single item entitled "Profits."

The other financial exhibit that should be given the stockholder or holder in any corporation is the balance sheet. Roughly this is a statement showing on one side of the page the assets or property of the company, which may be composed of many things. On the opposite side of the page is shown the liabilities or debt of the corporation. The total on the assets side and the total on the liabilities side always balance. There is much to be said in explanation of the various items in a balance sheet. There are opportunities for great differences of opinion in setting down certain items. Able accountants differ in their opinions on some technical points. The study and comprehension of a balance sheet is not near so easy as the income account. The income account is nothing more than a record of the money received and spent or set aside, while the balance sheet often involves some very fine questions of accounting far beyond the average investor.

In the case of the balance sheet we again find the railroad report most satisfactory for the reason that the Interstate Commerce Commission long ago laid down the general outline of this exhibit, and is constantly seeking to whip it into the clearest possible form. The Commission has given various items the most rational interpretation and ordered things so set down. Figures are said to never lie, but it should not be forgotten that they may be so arranged, especially in a modern corporation balance sheet, or for that matter in the income account, so as to be obscure or meaningless.

The industrial balance sheets when "condensed" or abbreviated offer the greatest opportunity for saying nothing in as few words or figures as possible. Take, for instance, the practice in dozens of cases of putting the value of the plant, the value of the good will, as estimated by the management, the value of patents as determined by the management, and several other items tangible and intangible, all together, and saying the value of the whole collection is so much. If the individual items were set out it would be difficult enough to arrive at a common conclusion, let alone lumping them all together in round figures. This is only a fair sample of what the investor contends with in attempting to understand the average industrial balance sheet.

The two main exhibits, therefore, of any corporation report are the income account and the balance sheet, out of which grow various tabulations showing the conduct of the business in detail and the character of the property and assets of the business. Of course the railroads' reports can be almost uniform, for their business is entirely similar. The form of report of one could be used on practically any other. With industrials there is necessarily some dissimilarity in detail and the presentation of various exhibits, financial and otherwise, but all can be built upon sound and rational principles if the builders so desire, and all can give a fair and reasonable presentation of the company's affairs without necessarily disclosing vital facts to competitors, and with fairness and justice to the security holders.

Four Essentials in Scientific Investment

WHEN an investor consults several investment advisers, or different houses dealing in investment securities, he will naturally find a wide variation in the particular securities recommended. Each adviser has his favorites and each house believes strongly in certain securities which it has investigated thoroughly and is interested in selling. Yet in regard to the main principles of scientific investment, all these advisers would be in substantial agreement.

These main principles may be reduced to four heads, which cover, directly or by implication, the essential points involved:

(1) *Dividing the investment among several different classes of securities.*—If, for example, you put all your money into railroad bonds, they will, as a rule, rise and fall together, because they are all subject to similar influences. This is well illustrated at the present time, when high-grade railroad bonds have declined persistently for about eighteen months. The bonds are safe enough, but the decline is unpleasant.

And if it is unwise to put your entire investment into railroad bonds, it is certainly much more unwise to put the whole sum into industrial securities, which change in value with changes in the activity of business. A fluctuation of half a dozen points in such bonds within a short period is by no means uncommon. And the same principle applies to all other classes of securities.

The first essential is, then, that the investment be distributed among several classes of securities. The investor should not only avoid "putting all his eggs in one basket," but he should not put them all in the same kind of baskets.

(2) *Selecting safe securities from each class, of a character adapted to individual requirements.*—In this the various bond houses and investment advisers would be of great help. If the investor has decided that railroad bonds shall be one of the classes of securities in which he will place his capital, houses which make a specialty of dealing in these bonds will quickly lay before him issues which they have thoroughly investigated and which they believe to be adapted to his requirements.

Likewise dealers in public utility or industrial securities will give him the benefit of their advice. After getting several opinions he can then pursue for himself such additional investigations as he desires. The general principles by which he will be guided in this selection have been discussed in this department in several preceding issues.

(3) *Buying at the right time.*—The broad movements of the bond market are so slow that the investor has ample opportunity to use his judgment and to secure expert advice as to the best time to buy. This is a difficult art, and he will never reach perfection in it. He can never expect to buy at the bottom or sell at the top, unless by accident; but he can hope to avoid buying at the top or selling at the bottom.

In a general way, the movements of the money market control the prices of high-grade bonds. Over a period of years, high money means lower prices for bonds, and low money means higher bonds. This is far from being the whole story, but it is the fundamental controlling influence. Buying at the right time is a life study.

With second rate or medium class bonds, and especially in the industrial group, the factor of time is most important. Prices of such bonds are influenced by business and economic conditions. This brings in the question of cycles of business activity. The more expert the investor becomes in judging future business conditions, the more successful he will be in buying his securities at the right time.

(4) After the above three points have been fully considered, and not until then, the investor takes up the question of *getting the highest possible return on his investment as a whole.* In this there is

ample scope for skill in the scientific balancing of the various securities. It is easy to make up a combination to yield 4½ per cent., but to obtain 5½ per cent. with the minimum risk, great care and discrimination are necessary. One or more issues showing a high yield and with what are believed to be good speculative prospects will have to be included; then to balance the greater possibilities of risk involved in such issues, the rest of the investment must be composed of strictly high-grade securities, on which the yield will, of course, be smaller.

We have not attempted to name these four essentials in the order of their importance, for this would differ according to the special circumstances of the individual investor. For example, where the investor may wish to realize on his securities at almost any time, Point (1) becomes highly important; for a woman's investment, especially if her entire fund is involved, Point (2) would be supreme; a business man, familiar with trade conditions, would naturally devote special attention to Point (3) in investing his surplus; while the degree of yield to be obtained under Point (4) would scarcely be the same for any two persons.

The Passing of the Low Yield Bond

By FRANCIS THEODORE TILTON

Author of "What the Investor Should Know About Bonds"

THERE has been such a decided decline in the prices of good railroad bonds within the last few years, with a corresponding increase in the interest return on these securities, that the matter has aroused considerable interest on the part of both the investing public and the borrowing corporations, and much discussion has been given to the subject. As indicating the downward trend during the past eight years, the average price of fifteen representative railroad bonds now selling at 95¼ sold as high as 107⅝ in 1905, thus showing a decline in market value during the period of over 12¼ points. Owing to this decline the income return on the investment has increased from 3.89 per cent. to about 4.53 per cent.

Even under the present conditions of lower prices and increased returns on the investment, big railroad corporations are having difficulty in interesting the investment public in securities yielding only 4½ per cent., as investors are now looking for a yield of from 5 to 5½ per cent.

The large railroad corporations fully realize the extent of this change in the investment market, and rather than commit themselves for a long period of years to the payment of comparatively high interest rates, they have resorted to the issuance of short term securities for their immediate corporate needs, hoping that when these mature they can be refunded by a longer term issue on more favorable terms. The question is, "Will conditions within the next few years materially change so as to again warrant the low interest rates which prevailed prior to the year 1906, or will conditions continue as at present, requiring the payment on the part of these corporations of as high rates as are now current?"

At the time when railroad bonds were selling on a 3.80 to 4 per cent. basis, an income return of 5 to 5½ per cent. was not considered compatible with safety of either principal or interest. From subsequent experience, however, the investor now accepts an income of over 5 per cent. with confidence that his investment is fully protected.

What are the factors affecting this change in investment conditions? What does the future hold forth? These are questions of interest to cor-

porations and investors alike, requiring careful consideration.

THE ELEMENTS OF NATIONAL WEALTH.

The wealth of a nation, or synonymously the people who live within its boundaries, is founded upon the natural resources of its territory. In a new land, however, it is many years before the country reaches a high degree of efficient production or before the hidden wealth is secured and transformed into improvements of a stable character, or in other words, into "fixed capital"—*fixed* capital being that part of our wealth which has been placed in permanent improvements, while *liquid,* or floating capital is that part of it which is ready for new enterprises.

There is no country richer in the possession of natural resources than the United States. When the people first started to develop these resources, each man developed that resource which was nearest or most convenient to him and which he could satisfactorily use for his own requirements, and the surplus of which, owing to market conditions, he could easily convert into some other form of wealth such as other needful commodities, or gold.

As society became more closely and efficiently organized, larger developments were undertaken. When the undertakings were small, it was comparatively easy for the individual to handle the enterprise himself. The capital which enabled him to finance the undertaking, while in the beginning small, represented the surplus wealth which he had been able to accumulate over and above his requirements. When the undertakings became larger, his own capital was augmented by that of his neighbors.

In the early days of our country there was very little unemployed capital available for new enterprises. It was therefore necessary to borrow a large amount from Europe, a country far older and one which through years of toil had been able to build up a goodly surplus.

From an economic standpoint, organized industry proved advantageous. In 1831 we had our first steam railroad, operated by a corporate company, the Baltimore & Ohio. It was not, however, until about 1898 that our industries became highly concentrated. Today we have a multiplicity of corporations of very broad scope—railroads, industrials, public utilities, etc.—fostered by advancement in our scientific knowledge and the increasing wants of our people.

The undertakings of these corporations are constantly in need of liquid capital for further development. Moreover, private individuals, municipalities and smaller business enterprises are equally solicitous for funds. This constitutes the "demand," and on account of its heterogeneous nature each interest is competing with the other for additional capital, thereby bidding up the price of the available supply.

In order to find the answer for high interest rates we must, therefore, consider the extent of the supply offsetting the demand. What are the factors increasing or diminishing its amount? Our total wealth has been increasing *per capita* each year, but the question is, "Has our liquid capital been proportionately increasing?" There is such a multiplicity of factors affecting our supply of liquid capital that we can not, of course, enumerate them all, but will touch upon the most important.

GOLD PRODUCTION AND PRICES.

One of our most important forms of wealth is gold. It is the one which is in universal demand by all countries and people and which passes current as a medium of exchange. Our wealth is figured in terms of gold; it is the standard of value. Economists universally concede the importance of the gold production as a factor affecting prices and now attribute the high cost of living and the high interest rates to the excessive increases in gold production during recent years, thereby augmenting the already large stock on hand.

Let us see how this gold finally becomes absorbed into the total circulation and how it affects prices. The miner, of course, is the one who starts this movement after having secured in exchange for his gold its value in some

form of money, or probably the gold itself duly coined and stamped by the Government. As soon as this is done, his purchasing power becomes increased to the extent of this additional wealth and immediately he is possessed with new wants. Previously he may have deprived himself of needful raiment, improved tools or a new horse, but as soon as his earning power has been increased he is in a position to secure these coveted articles. He, therefore, immediately makes demand on manufacturers, merchants, etc., for these articles, and they in turn make further demand for raw materials and labor.

In this way the gold produced at the mines disseminates throughout the whole country and becomes fully absorbed in our monetary circulation. It is like the throwing of a stone into a pool of water, resulting in ripple after ripple to the farthest shore. Each one connected with the enterprise receives a certain portion of the gold for materials or labor, and the purchasing power *per capita* is increased. Each participant in turn has new wants, as with the miner, and new demands are made on our supply of commodities, and this means increasing prices as these are regulated by the degree of the demand on the supply.

Our wants are ever growing; as Charles Wagner has written in his book on the "Simple Life," they are as complex as our existence. While the amount of foodstuffs which we can consume is limited, this is more than offset by our unlimited wants in other directions. We all want automobiles and if we had the purchasing power we would have them. Science is ever creating new wants for us. If the automobile had not been invented we certainly would not have wanted it.

CONSERVATION OF LIQUID CAPITAL

One of the most important laws in the psychology of advertising is that of suggestion. The knowledge of a new creation immediately suggests to us its possession. There is no limit to our wants—we are only limited by the extent of our purchasing power. Within the last decade there has been a wonderful advance in the theory of advertising, and no merchant in these days is guilty of permitting any of our wants to die of old age. In fact, advertisers are adopting the method of the scientific farmers—that of intensive farming—thereby raising a dozen crops where only one was produced before. All these things are factors which materially reduce the amount of money which we as a people have for investment. It is a case of competition between the pleasure of possession and the desirability of an income from a judicious investment.

Of course, any reduction in the cost of living would give us increased purchasing power for investment securities. The question is whether we would spend the amount so saved for additional commodities or whether we would place it in profitable investment channels.

Among the factors which would tend to reduce our cost of living, although probably not the most important, may be mentioned the tariff. This problem is one which requires most careful thought, and the action of President Taft in appointing a commission to look into this matter from an economical standpoint is a move in the right direction. Lower tariff rates would in some cases undoubtedly be beneficial, while in others they would be decidedly disastrous to the country. The matter should not be left entirely with legislators as the problem is too complex and important to be successfully solved through political motives.

The better regulation and control of corporations is another favorable factor for lowering the cost of living, as it curbs unscrupulous corporations in their efforts to obtain excessive prices while protecting fair-dealing corporations. The Interstate Commerce Commission is now a permanent fixture in our Government, and the recent enlargement of its duties and scope was another step along right lines. The control of railroads and corporations should rest in the hands of specialists who are broad enough to give a square deal to all parties concerned.

Another factor which we as a people must consider in our cost of living

problem is the more economical management of our Government. Taxes are constantly on the increase. If they continue to increase as rapidly as they have during the past few years, who will dare prophesy as to the future? While taxes may be assessed in some cases directly against corporations they are always ultimately paid by the consumer.

These are only a few of the hundreds of factors which affect our cost of living. A better understanding of economic principles will undoubtedly result in a conservation of part of our purchasing power; will the saving effected be used for the satisfaction of increasing wants or for investment purposes?

THE OUTLOOK.

Opportunities in this country are practically unlimited for the employment of capital. During recent years there has been a wonderful spread of knowledge regarding financial operations, and people who at one time would not invest outside of familiar territory are now willing to place funds at a distance. Bond houses, through advertisements, circulars and booklets, have done much toward enlightening the ordinary layman, while the work of the magazines and papers has been an equally important factor.

We are now investing funds outside of our own territory and the financial market of New York is beginning to take on an international aspect. With the opening of the Panama Canal, American capital will without doubt be employed in the development of the resources of South America, and with the opening up of China, American energy and capital will probably be in evidence.

From the above it does not appear that the demand on our liquid capital will subside, but on the other hand will probably increase during the coming years at a rate faster than any possible increase in its supply. This influence will be competitive, keeping up the interest rates on investment securities. Of course, there will be good substantial railroad bonds secured by mortgages on established properties that will command better prices than bonds on newer properties, but there will be a multiplicity of good, safe investment propositions on which liberal income returns will be received.

From what is before us it does not appear likely that corporations will be able to obtain funds at as low a rate as that which prevailed a decade ago. Many railroads are now in urgent need of new capital and a return again to the issuance of long term securities will probably in the end be more economical for them. Supply and demand is the one factor regulating the income return on investment securities, and as much as railroad corporations may dislike paying higher rates, they are powerless to alter the economic conditions.

The private investor should not, however, gain the idea from the foregoing that excessive income yields are under present conditions perfectly safe, for, on the contrary, as has always been the case, with each increase in the yield there is a corresponding decrease in either the safety of the principal or interest or marketability. There has simply been a readjustment of incomes to a higher level.

Of the securities of the same company the bonds, or obligations, will command a better price, or, in other words, yield less income than will the stocks. In choosing his investment, the investor should very carefully weigh the character of the securities under consideration. If he is after a high yield, and is considering stocks, he must ask himself whether the difference between the yield on the bonds and that on the stocks fully compensates him for the lessening of the factor of safety.

Bonds are promises to pay a certain sum at a given time, with interest during the life of the investment while stocks, on the other hand, simply constitute an ownership or equity in the property and are irredeemable so far as the company itself is concerned, with dividends payable only when earned and declared by the directorate. In the case of bonds, there is a certain definiteness—a definite maturity and maturity value, as well as a definite rate of interest—

which reduces market fluctuations to a minimum, and renders them a safer and better form of investment for the ordinary individual. Stocks, on the other hand, on account of the lack of definite characteristics, have a wider fluctuation in market price.

Owing to the high rates on bonds and short-term securities, many corporations of late have raised funds through the further issuance of stocks instead of bonds. They have in this way evaded obligating themselves, as would have been the case if bonds were issued. So long as stocks can be successfully marketed, the raising of funds in this way is a distinct advantage to corporations. Especially of late have there been many preferred stock issues floated. These are, however, a degree stronger than common stocks in that the rate of dividend is stipulated, but as in the case of the common stock, dividends are only payable when earned, and rank after the interest on the funded debt. In many cases the dividend on the preferred stock is made cumulative, i. e., if the full rate stipulated is not earned and paid during the year, the difference accrues and must subsequently be paid, provided, of course, it is earned by the company. No action can be taken, however, by the preferred stock-holder to force payment of his dividends.

Many preferred and common stocks constitute good investments, but the investor should use great discrimination in his choice. When it comes to making an investment, he should carefully consider what security the corporation has to offer for his money, and whether the interest return is commensurate with the risk he assumes.

Bond Market Topics

Has the Bottom Been Reached?

All the shrewd bond men of long experience and good judgment are trying to make up their minds as to whether the bond market is at the bottom. In bonds the range in prices is so narrow that the bottom is not far away from the top in many high-grade bonds, there being perhaps a difference of not more than three points. Just now there are those who believe we are practically at the bottom of bond prices for some time to come. They base their opinion on the fact that stock prices bear every evidence of the inherent strength of business and financial conditions and that bond prices must soon begin to feel the buoyancy of such a situation. It is often the case that when stock prices are down and people have become somewhat frightened, then bond prices move upward under good buying. The markets are in a peculiar situation in this respect. Stock prices have been rising for some months past and as is natural there has been a steady decline in bonds, but this has continued so long that the betterment in conditions is apparently beginning to work on the bond market. It is possible that we may soon see the two markets moving simultaneously upward as occurred in 1909. Until three years ago the theory had always been that the bond and stock markets move oppositely. At that time it was demonstrated that they could move together. It is perhaps to be demonstrated again.

Some Evidences of Betterment in the Bond Market.

It is one thing to make an abstract statement that sentiment is improving and that the bond market is giving evidence of this improvement, and it is another thing to produce proof of the change. The most substantial evidence of this improvement is to be found in the large amount of new bond financing that has come into the market in the past six weeks and the offerings that have been advertised. There were $10,000 General Electric debentures, $3,500,000 Northwestern Gas Light & Coke Co. 5% notes, $10,000,000 Philadelphia Co. 5% debentures, $5,000,000 Pacific Gas & Electric 5% bonds, and upwards of $5,000,000 miscellaneous bonds and notes, offered to the market within this time. So much has not been offered in so short a time for a while back. Reports from all these offerings were to the effect that they were well received. It is not usual to offer such large amounts of securities of this character unless there is some substantial basis for the effort. Over the past few weeks there seems to have run a feeling through a number of the bond houses that the time was ripe for the offering of such securities as have been mentioned. Of course, the houses are all the time working on their securities, selling more or less all the time. They refrain from making big public offerings until the moment seems propitious. A few weeks ago the total offerings in one

day's advertisements ran close to $20,000,000, a very significant fact in its relation to the question as to whether the bond market is better or not.

Will Preferred Stocks Have Another Big Inning?

The investment appetite, created over a long period, for offerings yielding 7% does not seem to have been appeased. It is interesting to note the yields on the various securities other than preferred stocks offered during the past few weeks. One yielded 5.30%, another 5.60%, but the larger part of them hovered around 6%, either over or just under that figure. From the fact that the offerings pretty generally yielded so substantial a return it is clear that the investment public have not come into a frame of mind where the higher grade low yield bond is entirely acceptable. The average investment return on the offerings mentioned is, to be sure, under the 7% preferred stock income, but it is as high as possible and still be interest and not dividends. The temper of the investment market is such as to justify the belief that preferred stocks will have another big inning. Buoyancy in the general investment market has carried many stocks far below the 7% yield. Let another series of attractive preferred stocks yielding the investor 7% be presented and we may expect a repetition of the months gone by when offerings of this character disappeared into investment strong boxes with a rapidity that astonished even those who marketed them.

Investing $10,000 Surplus

Suggestions to a Business Man

EDITOR of THE MAGAZINE OF WALL STREET:

I am availing myself of your offer to your subscribers in this month's magazine to advise me how best to invest $10,000 surplus funds. What is best for a business man at this time, to gain the best results? I was tempted to put it in bonds of the class of Denver & Rio Grande refunding 5's at 82 or Missouri Pacific 4's at 72 or Missouri Pacific convertible 5's at 86. Also I have thought perhaps short term railroad notes might be a good investment at this time. Your advice will be appreciated.—C. F.

Both Denver & Rio Grande refunding 5's and Missouri Pacific 4's are speculative bonds, and should not, in our opinion, be purchased as an investment. Even as a speculation it seems to us that it would be better not to purchase these bonds just at the present time.

St. Louis, Iron Mountain & Southern unifying and refunding 4's are now selling around 80, at which price they yield about 5.86. We would prefer these to Missouri Pacific 4's. Also St. Louis, Iron Mountain & Southern Railroad River and Gulf Division 4's of 1933, selling around 83, yielding about 5½ per cent., are worthy of careful consideration. As the Iron Mountain system is the best part of the Missouri Pacific road, we would rather have these bonds than Missouri Pacific 4's.

Public utility bonds have recently been coming into favor with investors, and numerous good offerings have been made. We might mention:

American Telegraph & Telephone 4's of 1929.

Pacific Telegraph & Telephone 5's.

United Light & Power Company 3-year 6 per cent. notes callable at 102 would be desirable short term notes, if you desire this form of investment.

Blue Ridge Electric Company 1st 5's (Georgia Railway & Power system) 1940, price 95, yielding about 5.35. The Georgia Railway & Power Company has the right to retire these bonds on or before October 1, 1916. If they do so the yield would be increased to 6.44.

Standard Gas & Electric Company convertible sinking fund 6's, 1926, price 101, yield 5.9 per cent. These are secured by a pledge of stocks and bonds of eighteen public utility companies, serving over 100 communities, thus giving increased safety through distribution.

Public utility securities are favored under present conditions because they afford a somewhat larger income than railway issues, accompanied by equal chances of appreciation. The necessary character of the service rendered by our public utility companies affords a strong foundation for the value of these securities.

The Bond Buyer's Guide

IN the following table are arranged in order of yield the principal active issues of bonds listed on the New York Stock Exchange, the income being figured at the latest available selling price for lots of 20 bonds or more. They are divided into groups, according to the grade and character of the bonds.

This table will appear monthly, and will prove invaluable to bond buyers, as well as to brokers and to all others who are called upon to select or recommend investments It is presented for purposes of comparison only, and mention of a bond issue is not to be construed as a recommendation. Our object is merely to show the relative yield of different bonds of each of the several classes.

(1) High Grade mortgage bonds, many of which are legal investments for New York State Savings Banks.

Description.	Due.		Interest Period.	Price. Oct. 11.	Yield.
Chic., Rock Is. & Pa., ref. g. 4s	Ap.,	1934	A.—O.	87⅜	4.96
Union Pacific, guar. ref. 4s	D.,	1929	J.—D.	92⅛	4.68
Wabash, 1st g. 5s	My.,	1939	M.—N.	105¼	4.65
Atch., Top. & S. Fe, adj. g. 4s	Jl.,	1995	Nov.	87¾	4.57
Erie 1st con. g. 4s. prior	Ja.,	1996	J.—J.	88	4.56
Ches. & Ohio, gen. g. 4½s	Mh.,	1992	M.—S.	99¾	4.51
Atch., Top. & S. Fe., Cal-Ariz. 1st & ref. 4½s	Mh.,	1962	M.—S.	100	4.50
Oregon-Wash. 1st & ref. 4s	Ja.,	1961	J.—J.	90½	4.48
Wisc. Central, 50-yr. 1st gen. 4s	Jl.,	1949	J.—J.	91⅝	4.47
Chic., Mil. & Puget Sd., 1st. gu. 4s	Ja.,	1949	J.—J.	92½	4.41
Sou. Pac. R. R. 1st ref. 4s	Ja.,	1955	J.—J.	93⅜	4.34
C. B. & Q., Ill. Div., 3½s	Jl.,	1949	J.—J.	85	4.32
Illinois Cen. 1st. ref 4s	N.,	1955	M.—N.	94	4.31
Mo. Kansas & Texas, 1st g. 4s	Je.,	1990	J.—D.	93¼	4.30
Atl. Coast Line, 1st g. 4s	Je.,	1952	M.—S.	95	4.26
Northern Pac. gen. lien g. 3s	Ja.,	2047	Qu.—F.	69½	4.24
Cent. Pac., 1st ref. gu. g 4s	Ag.,	1949	F.—A.	95½.	4.24
Chic., Rock Is. & Pac., gen. g. 4s	Ja.,	1988	J.—J.	94¾	4.23
Chic. B & Q., gen. 4s	Mh.,	1958	M.—S.	95½	4.22
Union Pacific, 1st. & ref. 4s	Je.,	2008	M.—S.	95½	4.19
Kansas City Term'l 1st 4s	Jl.,	1960	J.—J.	97	4.15
Reading Co., gen. g. 4s	Ja.,	1997	J.—J.	96⅝	4.15
Louisville & Nashville, uni. g. 4s	Jl.,	1940	J.—J.	97¾	4.14
Balt. & Ohio, g. 4s	Jl.,	1948	A.—O.	97½	4.13
Chic. & N. West., gen. 4s	N.,	1987	M.—N.	97⅛	4.13
Chic. Mil. & St. P., gen. g. 4s, Ser. A	My.,	1989	J.—J.	97¼	4.12
Norfolk & West. Ry., 1st cons. g. 4s	O.,	1996	A.—O.	97⅜	4.11
Atch., Top. & S. Fe, gen. g. 4s	O.,	1995	A.—O.	97¾	4.10
Del. & Hudson, 1st & ref. 4s	My.,	1943	M.—N.	98⅜	4.09
C. B & Q., Ill. Div., 4s	Jl.,	1949	J.—J.	98½	4.08
Northern Pac. prior l. g. 4s	Ja.,	1997	Qu.—J.	98¼	4.07
Union Pacific gold, 4s	Jl.,	1947	J.—J.	100	4.00

(2) Collateral trust bonds selling at prices relative to the great value of the underlying collateral.

Chic., R. I. & Pac. R. R. 4s	N.,	2002	M.—N.	69½	5.75
So. Pac. Co., g. 4s (Cent. Pac. coll.)	Ag.,	1949	J.—D.	88¾	4.64
Gt. Nor., C. B. & Q. coll. tr. 4s	Jl.,	1921	J.—J.	95½	4.62
Erie, Penn. coll. tr. g. 4s	F.,	1951	F.—A.	89½	4.58
N. Y. Cen. Lake Shore coll. g. 3½s	F.,	1998	F.—A.	79¾	4.42
Atlantic Coast Line, L. & N., coll. g. 4s	O.,	1952	M.—N.	93⅛	4.36

(3) Convertible bonds having no mortgage lien whose quotations are governed largely by the price changes of the stock into which they are convertible.

Erie, 50-yr. conv. 4s Ser. B	Ap.,	1953	A.—O.	79	5.26
Ches. & Ohio, conv. 4½s	F.,	1930	F.—A.	93⅞	5.03
Erie, 50-yr. conv. 4s Ser. A	Ap.,	1953	A.—O.	88½	4.63
Del. & Hud., 10-yr. conv. deb. 4s	Je.,	1916	J.—D.	98	4.55
Sou. Pac. Co., 20-yr. conv. 4s	Je.,	1929	M.—S.	94	4.51
N. Y., N. H. & H., conv. deb. 6s	Ja.,	1948	J.—J.	129	4.38
Atch., Top. & S. Fe., conv. 4s (issue 1910)	Je.,	1960	J.—D.	105⅝	3.75
Union Pacific, 20-yr. conv. 4s	Jl.,	1927	J.—J.	103	3.74
Atch., Top. & S. Fe., conv. g. 4s	Je.,	1955	J.—D.	109¼	3.65
Atch., Top. & S. Fe, 10-yr. conv. g. 5s	Je.,	1917	J.—D.	111	2.64

(4) Debenture bonds most all of which are selling on high level because of the good general credit of the respective companies.

Chic., R. I. & Pac., 20-yr. deb. 5s	Jl.,	1932	J.—J.	92¼	5.65
Lake Shore, deb. g. 4s	S.,	1928	M.—S.	92½	4.67
N. Y. Cen. & H. R. deb. g. 4s	My.,	1934	M.—N.	92	4.59
Lake Shore, 25-yr. g. 4s	My.,	1931	M.—N.	92⅜	4.53

(5) Semi-investment bonds, many of which are general mortgages, often classified as "business man's" investments. Income yield is reasonably definite index of relative worth.

Peo. & East, income 4s	Ap.,	1990	Apr.	49	6.88
St. L. & S. F. R. R., gen. 15-20-yr. 5s	My.,	1927	M.—N.	84	6.58
Nash., Ch. & St. L., 1st 7s	Jl.,	1931	J.—J.	102⅛	6.58
Seaboard Air Line, adj. 5s	O.,	1949	F.—A.	77½	6.38
Denver & Rio. Gr., 1st & ref. 5s	Ag.,	1955	F.—A.	82½	6.06
Wabash, 1st ref. & ext. g. 4s	Jl.,	1956	J.—J.	68	6.01
St. L. & S. F., K. C., Ft. S. & M. Ry., ref. g. 4s.	O.,	1930	A.—O.	78⅛	5.97
Mo. Pac., 40-yr. g. l. 4s	Mch.,	1945	M.—S.	72	5.91
Mo., Pac., 1st & ref. conv. 5s	S.,	1959	M.—S.	87⅝	5.75
Can. So., 1st ext. 6s	Ja.,	1913	J.—J.	100⅛	5.74
St. L., S. W. cons. g. 4s	Je.,	1932	J.—D.	80⅛	5.67
St. L. & S. F. R. R. ref. g. 4s	Jl.,	1951	J.—J.	77¾	5.37
Southern, devel. & gen. 4s, Ser. A	Ap.,	1956	A.—O.	79⅛	5.22
Erie, 1st cons. gen. l., g. 4s	Ja.,	1996	J.—J.	77⅞	5.16
Wabash, 2d. g. 5s	F.,	1939	F.—A.	99	5.07
Colorado & Sou. ref. & ext. 4½s	My.,	1935	M.—N.	94	4.95
West. Maryland, 1st g. 4s	O.,	1952	A.—O.	86	4.79
Southern 1st cons. g. 5s	Jl.,	1994	J.—J.	106	4.71
N. Y., W'ches. & B. 1st, Ser. 1, 4½s	Jl.,	1946	J.—J.	99⅜	4.54

INVESTMENT DEPARTMENT

INVESTMENT: The placing of capital in a more or less permanent way, mainly for the income to be derived therefrom.

The Earmarks of a Worthless Stock

Some Common Methods of Promoters Which Should Put the Investor on His Guard

By WILLIAM T. CONNORS

UNDOUBTEDLY sales of worthless stocks to the people of the United States by swindlers or over-enthusiastic promoters are frequently overestimated.

In the case of a notorious concern of this character closed by the Post Office Department a year or two ago, which had floated between thirty and forty companies, none of them of any real value, the Postmaster-General estimated the money which had been filched from trusting victims at $50,000,000. But I was informed by an experienced broker who had watched the operations of this firm very carefully, that this was at least ten times and perhaps twenty times the actual gross profits it had reaped.

No one knew the exact figures, but the Post Office Department was certainly overshooting the mark.

Nevertheless the aggregate losses of the public in worthless stock promotions are large enough to be staggering. For those who fall into the trap through ignorance and greed, combined with a sort of gambling temperament which leads them to take unwise risks without due consideration, there is perhaps no help except the slow and painful process of learning by experience. But the surprising thing is that many intelligent men, with every opportunity to learn how to tell a good investment from a worthless one, "take a chance" in these plausible schemes, merely on the theory of "big risk for big profits."

Every few months we read in the newspapers that the estate of some prominent man was found after his death to include thousands of dollars in unsalable securities. This was true even of the head of a great bond house which had safely guided thousands of investors in the placing of their funds. Evidently this banker did not take his own medicine. He had one rule for himself and another for his customers.

The theory of "big risks for big profits" breaks down absolutely on investigation. The victim argues, "If only one in ten of these propositions proves a success, the profits on that one will be large enough to make up for the losses on the other nine." But the trouble is that not one in a hundred succeeds; and the very ones that strike the prospect as the most plausible, usually pan out the poorest.

Now, there may be some worthless stock propositions presented with such well simulated conservatism as to deceive the very elect. But in most cases the methods of the promoter give him away very quickly, if only the prospective investor can be induced to consider them calmly and sanely, without allowing his own greed to run away with his judgment. The literature sent out by these schemers and visionary enthusiasts bears its own earmarks.

For example, a few years ago an active campaign of personal solicitation was carried on for a "gold mine" located in Arizona. A beautiful prospectus showed elegant and convincing half-tones of the shafts, the machinery in operation, etc. It certainly did look like a mine in those pictures. One of the solicitors was so enthusiastic over it that, to my personal knowledge, he invested a large part of his savings in the stock.

This stock was to be listed on the New York Curb, so the solicitors stated, in thirty days at an advance of 25 per cent. over the price at which you could now get in "on the ground floor"; and "to protect the price," the contract of purchase prohibited the buyer from selling his stock for ninety days! You could buy the stock but you were prohibited from selling it!

Yet this barefaced scheme for forming buyers into a ninety-day pool to bull the stock, found many takers, who regarded it, presumably, as "high finance" instead of merely an earmark of fraud.

The announcement that a stock will be opened on the curb at a price much above that paid by advance subscribers is a favorite one of that great friend of the people, Tom Lawson. His treatment of those who had confidence in him, in connection with Bay State Gas—or "National Stock," as he renamed it—is well remembered, especially by those who bought the stock.

In another instance, the promoters underwrote a stock at $3.50 a share; then their friends and customers were let in on the ground floor at $4, with the information that the stock would be opened on the curb in a few days at $5. In fact, it did sell as high as $4.75 on the curb—and then gradually declined to 19 cents a share.

It is curious that the trustful buyers did not ask themselves, "If this stock is worth $5 tomorrow, why are they willing to sell it to me at $4 today?" The answer would be that the promoters were glad to sell it for $5, $4, $2, or any other sum, the only important thing being to sell as much of it as possible at any price.

As a rule, the lower the par value of a stock the less desirable it is likely to prove as an investment. A stock of less than $10 par may well be regarded with suspicion, and the highest class of securities are likely to be issued at $100 par.

Where a strictly high grade company would probably be capitalized with 2,000 shares at $100 each, the fakir will perhaps issue 1,000,000 shares at $1 each and sell them for 25 cents a share. He is working upon the greed of his prospects, trying to make it appear that they get a great deal for their money and get it at a wonderful bargain. Such methods would not be employed by a house of high standing, and if they were employed they would not appeal to the customers of such a house.

In general, any announcement that "The price of this stock will positively be advanced 10 per cent. October 1 next," etc., stamps the proposition as a fake. The price of a legitimate stock selling at a legitimate figure cannot be arbitrarily advanced in this way. Its value can only grow with the development and progress of the company.

Selling of low priced mining and other stocks by promoters on the instalment plan is another lure for the greedy and improvident. The arbitrary price advances are often timed to come before the future instalments are due, so that buyers can figure out a big per cent. of gain on the small amount required for the first instalment. It is unnecessary to add that the payment of future instalments is not contingent upon the price increase. The clause which covers "getting the money" is pretty sure to be a hard and fast contract of payment on a given date.

Where the instalment plan is employed, a large discount for cash is usually given—often 10, 15 or 20 per cent. This is another straw to show which way the wind blows. In indicates plainly enough that all the stock sellers are interested in is bringing in as much money as possible, regardless of the price obtained for the so-called "securities."

Paying dividends while the promotion stock is being sold is a device so transparent that one wonders how it can be successfully employed. Common sense, it would seem, should tell anybody that a company cannot legitimately pay dividends until it is thoroughly organized

and set going as a running concern. This is pretty sure to take two or three years at least.

The assurance of early dividends is likely to mean that they will be paid out of the original capital turned in by the investors, *à la* "520 per cent. Miller" and others of his ilk.

The offering of some special opportunity is a favorite trick. Although the stock was advanced from $1 to $1.25 a share the first of last October, a few shares have been given up since that date by investors who were prevented from completing their payments by illness, and a special opportunity is now offered TO YOU to buy the said shares at the old price of $1, etc. Or, the date of advancing the price has been postponed for thirty days in order to enable a large number of investors who are considering the matter to get in before the advance takes place and thus start on an even footing with others, etc.

The purchaser's experience in bargain stocks of this kind is likely to be just as unhappy as with bargain shoes or bargain cigars.

Lists of directors having high sounding titles are perfectly easy to get. There comes to my mind the scheme of a Chicago mining stock promoter some years ago to "work" professional men. He had several different companies, each with a list of directors made up from a single profession.

For example, he got a lot of prominent physicians to act as directors on one company, allotting them a liberal amount of stock in the company in payment for their "services." Then these names, well known among medical men, were used as bait in working lists of physicians all over the country.

There is never any trouble in getting these prominent directors. They are as easy as patent medicine testimonials.

There is one general principle that applies in all these cases: When a man makes a strong appeal to your greed—for probably none of us are quite exempt from this weakness—you are safe in making up your mind that he has some reason for doing it. This appeal may be bald and open or it may be covert and snaky—it makes no difference. If the appeal is there something is wrong.

If a house is floating a legitimate proposition, it will so frame its appeal and plan the organization of its company as to satisfy legitimate investors. If the proposition is put before you in any other light, leave it alone.

It is not true, however, that every proposition presented thus conservatively is necessarily a safe one. The "skate promoters," as Wall Street calls them, have lately taken a leaf out of the books of the bond houses, and some of them have abandoned the transparent schemes above described and have begun to imitate the real thing just as closely as possible.

"People are getting afraid of discounts and bonuses and sensational circulars or newspaper advertising," said one of these gentlemen to me recently. "The way to sell a stock now is to float it at about $100 a share and handle it through personal solicitation. In order to sell stocks now the solicitor has got to get his man in his own home after dinner and present the proposition to him in the most conservative way."

This is good news, as indicating that, although there may still be a "sucker born every minute," the time is passing when these suckers will snatch at a bare hook or a bit of red flannel, like a frog. The artificial fly has got to look pretty natural now in order to catch anything.

Of course, the only way to be safe is to buy only of the best houses, and if you are not familiar with them, to investigate the standing of both the house and the stock before parting with your money. But doubtless it will be some time yet before the big public arrives at this stage of discretion.

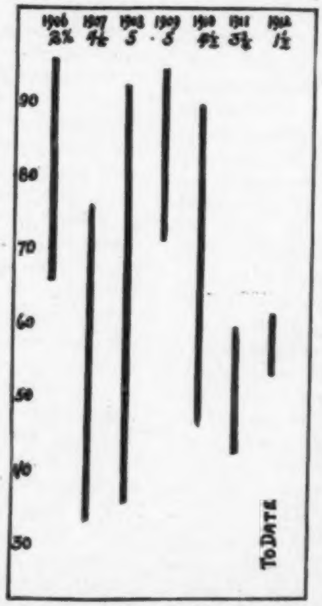
Intimate Talks on Securities

National Lead—An Industrial Which is Recovering From a Two Years Sleep

By RICHARD D. WYCKOFF
Author of "Studies in Tape Reading," Etc.

TO me the price of a stock, its action when the market is weak or strong, the volume of trading, and the support or pressure from inside or outside, have more significance than what I read in the newspapers.

Cynical Wall Street speculators will tell you that when the market is at the top, bullish news is most plentiful, and to a certain degree this is so. The newspapers give the public what they want. One large financial publication makes it a practice to accumulate news on the various railroad and industrial stocks whenever it is obtainable, withholding these news items until there is a demand for them. This demand appears when the buyers for the stock are most numerous; people want to know about those issues which they are purchasing or considering. From this it will be seen that the quantity of bullish information in print is not always deliberately managed by manipulators, but is more or less the working out of that old law of supply and demand.



ANNUAL RANGE OF NATIONAL LEAD COMMON.

When therefore I read on the news slips, early in October, that National Lead was likely to increase its dividend, I recalled the fact that the tape had indicated, some days previous, that some similar rumor would soon appear.

From 1901 to 1905 this stock paid no dividend. In 1906 it sold at 95⅜, although it paid only 2 per cent. that year. In 1907, although the dividend amounted to 4½ per cent. during the calendar year, it sold as low as 33 in the panic. From 1908 to 1910 inclusive, its high average price was 92, with a dividend rate of 5 per cent. for most of that period. But in 1910 this dividend was cut, and from that time until September this year the highest price recorded for the 3 per cent. common stock was only a fraction above 60.

On October 7, 68¼ was the highest figure touched. As this was several points above the old level, an important change in National Lead's affairs, commercial or marketwise, was the natural deduction.

I do not know whether National Lead will increase its dividend or not, but I do know that the company is doing a cracking good business, which, if continued, will eventually result in a larger distribution.

It seems strange that the depletion of American forests should be a factor in National Lead's affairs, but this is so, although it is not the most important consideration at present. As our timber lands are replaced by wheat, corn and oats, the shortage in lumber forces its price higher and higher, making it increasingly expensive to erect and properly maintain wooden buildings of all sorts. And while in the past it might have been economy for some people to repaint their houses on

their crystal and golden anniversary days only, neither the farmer nor the householder wants his buildings to run down in the present state of the lumber market.

Years of experience have proved that the best quality of paint is made from a mixture of pure white lead and linseed oil, and the pure white lead is the National Lead Company's long suit. In the manufacture of white lead a very considerable quantity of linseed oil is also used, so that the price of the later product enters very largely into the item of manufacturing costs, as well as the total amount of white lead consumed.

The price of linseed oil is dependent upon the flaxseed crop. If the farmers don't plant flax, or weather conditions are unfavorable, the price of linseed oil advances, hence the price of white lead. A falling off in consumption of paint follows in due course. In 1907 the flaxseed crop of the world was 105,000,000 bushels; in 1908, 99,000,000; in 1909, 85,000,000; in 1910, 66,000,000—a very remarkable four-year shrinkage. For fifteen years prior to 1908, linseed oil had averaged in price about 40 cents per gallon, but in November, 1910, it touched 97 cents, thus narrowing the margin of profit on white lead and injuring the market for paint and other products in which the use of linseed oil was compulsory.

This situation caused such a drop in the consumption of paint that the National Lead Company was obliged to cut its dividend to 3 per cent. And that reminds us that if this concern were rightly named, it would be called the National Paint Company, as more closely distinguishing its principal product.

Aroused by the seriousness of this situation, the National Lead Company and other allied interests began a country-wide campaign among the farmers, demonstrating the advantages in the culture of flaxseed. The American crop last year was 19,000,000 bushels; this year the indicated yield is 29,000,000 bushels—no doubt, due in part to the dissemination of educational literature on this important crop.

Without going into technicalities, white lead, nature's true paint pigment, is a white powder made by exposing metallic lead to the fumes of weak acetic acid (vinegar) and carbonic acid gas.

Commercially there are various ways of producing it, but the best is the method known as the old Dutch process. It is simplicity itself. The lead is cast into perforated disks, or "buckles," about six inches in diameter, which are piled flat in earthen pots, so made that only the fumes of the acetic acid in the bottom come in direct contact with the metal. A bed of spent tanbark is first spread, and the earthenware pots placed thereon. A floor of boards is laid over the pots, and another layer of tanbark on the boards. A second layer of pots is then arranged on the tanbark, and alternating layers of tanbark and pots are built up until a high "stack" is formed. The acid fumes attack the lead and the tanbark gives off carbonic acid gas. The chemical process continues until the metal "buckle" is corroded into white lead. The process takes from 90 to 110 days.

The white substance is then ground between stone burrs—ground and reground with painstaking care in clear water, which washes out all acids and impurities—sifted through fine silk meshes, and when sufficiently fine is mixed with linseed oil in the form of a paste, as desired.

We have said that white lead is the basis of the best quality of paint. There are ready-mixed paints made of substitutes for white lead, but these do not give satisfaction in the long run. And the good old-fashioned kind of paint which will wear best, look best, and last the longest, is the kind our grandfathers mixed with a stick. You may have noticed the National Lead Company's advertisements in the high-class magazines. The object of these was to spread the truth about paint. Large amounts of money have been spent in this educational work, the National Lead Company's policy being about as broad as that of the American Telephone and Telegraph advertising campaign.

Building statistics and general busi-

ness conditions throughout the country are a governing factor in the demand for paint, and for the National Lead Company's other products, viz., lead pipe, solder, sheet lead, lead traps, and other plumbers' materials. When the country is prosperous, people spend more money in the upkeep of their buildings and residences, a duty which in lean years is apt to be neglected. Business conditions throughout the country are showing an improvement, and building statistics as represented by permits for new buildings issued in twenty leading cities have been increasing at the rate of 20 per cent. over 1911.

We now have two highly favorable factors, viz., increasing consumption and decreasing cost of production, for the price of linseed oil is now 60 cents. Thus the margin of profit is widening. The company reports that all its plants are now being operated at their maximum capacity, that deliveries are a thousand tons behind, and it is therefore difficult to catch up with orders. This does not necessarily mean an immediate increase in the dividend rate, for it is the company's policy to make all improvements out of surplus earnings, thus avoiding an increase in bonded debt or capital stock.

Certain other influences are working for a further reduction in cost of production—a revolutionary reduction, in fact, if present indications are borne out; but the management at present is not imparting any information on this point.

Who controls National Lead? This is a question which is very frequently answered in two words—the Guggenheims. This may be true and it may not. We know that the Guggenheims resigned from the directorate during the later part of 1911, and the annual report for that year is authority for the following:

"The total number of stockholders on December 31, 1911, was 7281. Of this number, 45 per cent. are women, being 3050 in number. As has been previously stated, there are no stockholders who have exceptionally large holdings."

But this does not prevent control being held through many dummies, with a comparatively small amount of stock in each name, or by means of the highly effective proxies obtained from these and other small and scattered stockholders.

Control by the Guggenheims either in the open or sub rosa seems to be the natural condition, as the National Lead Company is the largest buyer of pig lead, and the American Smelting & Refining Company enjoys practically a monopoly of the lead refining business.

Up to the time of National Lead's recent stock market activity there did not appear to be any pool or inside interest working in the stock in a systematic way; but the rise to 68 did not seem altogether spontaneous. That price is enough for a 4 per cent. industrial, even though it is held in such high esteem by investors and has demonstrated its ability to pay a small dividend under extremely adverse conditions.

In calling attention to the stock, I am not especially advocating either its purchase or sale, for this is not within the province of our publication. I am merely summing up the facts in the case and presenting a picture of the market position of the stock, thus making it easy for those who wish to form their own opinions.

Some Recent Investment Literature.

Pamphlet showing, among other things, comparisons of earnings, yield and margin of safety as between public utility, industrial and railroad securities. Wm. P. Bonbright & Co., New York.

Pamphlet "Should the Prices of Investment Bonds Advance?" A discussion of some fundamental considerations in the bond market. D. Arthur Bowman & Co., St. Louis.

Pamphlet "Judicious Investment," explaining some basic facts about the subject. Spencer Trask & Co., New York.

THE BARGAIN INDICATOR

Comparative Earnings of Important Stocks

NOTE—The minus sign (—) before figures below indicates a DEFICIT for the year equal to the per cent. on stock given. Additions and betterments are included in earnings given, wherever distinguishable from ordinary expenses of maintenance, since earnings invested in improvement of the property increase the equity of the stockholders and therefore render the stock more valuable. The value of a stock cannot be judged by its position in the table ONLY. Earnings for successive years as given should be carefully examined, with a view to stability and growth as well as amount. Latest earnings will be found in table of "Monthly Net Earnings" or "Investment Digest."

Railroads	Present div. rate.	Earnings on par for fiscal year ending on any date during 1906.	1907.	1908.	1909.	1910.	1911.	1912.	Present price.	Earnings last fisc. yr. on pres. pc.	Notes.
Hocking Valley com......	8	9.9	11.2	6.0	8.3	18.2	16.7	16.6	143	11.6	Very inactive. Controlled by Ches. & O.
Southern Railway com....	0	1.9	—0.6	—2.2	0.5	2.3	3.1	3.1	29	10.7	Pfd. now on 5% basis.
Twin City Rapid Tran. com	6	8.1	8.2	8.3	9.9	10.9	11.0	....	107	10.3	
Louisville & Nashville......	7	10.6	10.7	7.5	14.3	17.3	14.2	15.9	161	9.9	Controlled by Atl. Coast Line.
St. Louis S. West com....	0	—2.7	3.7	—4.2	—2.5	—1.1	1.4	3.8	39	9.8	Pfd. now paying full div. of 5%.
Brooklyn Rapid Transit...	5	4.8	4.4	4.1	4.2	5.6	6.8	8.3	91	9.2	Subways will doubtless enlarge earnings eventually.
Atlantic Coast Line.......	7	10.8	6.3	5.6	9.4	12.0	12.8	....	140	9.1	Holds control of Louisville & N. by stock ownership.
Norfolk & Western com..	6	9.7	9.0	7.1	8.7	11.6	9.0	10.1	116	8.7	Controlled by Penna.
Chesapeake & Ohio.......	5	7.3	5.4	4.4	6.4	10.0	5.1	6.8	83	8.2	Recent earnings reduced by Chicago extension.
Union Pacific com.......	10	14.2	16.5	16.2	19.1	19.2	16.6	13.8*	173	8.0	Holds $307,106,000 secur. of other cos.
Minn., St. P. & S. S. M. com	7	11.7	9.6	8.4	8.8	15.7	5.3	11.1	144	7.7	Pfd. and com. share above 7%. Contr. by Can. Pac.
Seaboard Air Line Ry. pfd	0	....	....	....	....	....	7.6	3.7	49	7.6	Reorganization completed 1910.
Lehigh Valley com.........	10	18.2	20.0	19.2	15.4	23.0	16.5	13.2	176	7.5	Jan., 1912, ex. div. 10% and rights eq. abt. 8%.
Atchison com.............	6	11.8	15.0	7.7	12.1	8.9	9.3	8.0	109	7.3	
Canadian Pacific	10	14.1	13.7	10.6	8.6	16.0	17.3	19.6	267	7.3	Div. 7% R. R., 3% land sales.
Buff., Roch. & Pittsb. com.	6	8.6	8.7	6.2	6.3	7.3	8.0	8.4	117	7.2	Pfd. and com. share equally above 6%.
Delaware & Hudson	9	12.6	15.2	12.4	12.2	12.5	12.3	....	170	7.2	
Reading com.............	6	13.9	13.0	12.7	13.2	16.1	13.8	12.5	177	7.1	Suit pending in Supreme Court. Controls Jersey Cen.
Baltimore & Ohio.........	6	12.6	9.9	5.1	7.1	8.9	6.9	7.6*	107	7.1	
Southern Pacific com.....	6	8.1	12.5	7.4	10.2	13.0	9.6	7.6*	111	6.9	
Pennsylvania Lines	6	11.7	10.7	9.0	11.0	9.3	8.6	....	124	6.9	Has paid divs. since 1856.
Rock Island Co. pfd......	0	....	....	....	....	1.6	3.8	....	55	6.9	R. I. Co. owns 94% of stock of R. I. Lines.
Mo., Kansas & Texas com.	0	1.8	5.0	0.4	0.7	0.8	2.0	....	29	6.9	
Colorado & Southern com..	2	3.5	4.5	4.8	4.9	7.3	5.2	2.6*	40	6.5	Controlled by C., B. & Q. (Hill management).
Pittsb., C., C. & St. L: com	5	8.6	8.8	7.2	9.8	6.1	7.0	....	108	6.5	Pfd. and com. share above 5%. Controlled by Penna. Co.
Northern Pacific com.....	7	14.5	15.1	12.8	10.7	9.0	8.2	7.9	127	6.2	Large equities in lands and C., B. & Q.
N. Y., N. H. & Hartford..	8	12.2	9.2	5.4	7.4	10.3	7.1	8.5	139	6.1	
Great Northern pfd........	7	13.0	11.8	7.1	8.3	8.5	8.3	....	139	6.0	Has large equity in C., B. & Q. and Canadian extensions.
Delaware, Lack. & Western	20	22.2	38.5	40.8	52.8	35.4	31.8	....	538	5.9	"Other inc." reduced acct. segregation Coal Co.
Denver & Rio Grande pfd.	0	8.1	9.1	7.7	6.6	8.3	4.7	2.0	40	5.0	Contr. and finances W. Pac., wh. doesn't earn fxd. chgs.
Chicago & Northw'n com..	7	14.8	12.7	11.2	11.4	7.7	8.0	7.1	141	5.0	Pfd. and com. share above 7%.
N. Y. Central	5	4.6	6.2	5.1	7.7	6.4	5.7	....	116	4.9	Controls 1/7th Rdg. through Lake Shore.
Clev., C., C. & St. L. com	0	4.1	3.1	0.4	4.8	2.1	2.8	....	59	4.8	
Minneapolis & St. L. pfd.	0	10.4	7.8	2.7	—2.4	1.9	1.9	....	51	3.7	
Illinois Central	7	....	....	8.4	7.4	7.1	10.3	3.2	130	2.5	Div. paid since 1863. Probably not earned this yr.
N. Y., Ontario & Western.	0	2.0	2.8	2.6	2.3	2.3	2.0	0.8	37	2.2	
Erie com.	0	2.2	3.0	—3.7	0.3	2.9	2.5	0.7	35	2.0	
Chicago & Alton pfd......	0	4.9	9.0	6.5	8.2	5.4	0.6	....	30	2.0	Contr. by Tol., St. L. & W.—U. P. owns $10,343,000 pfd.
Chic., Mil. & St. Paul com	5	12.3	10.5	9.5	7.2	8.0	7.1	1.6	112	1.4	
Chicago Gt. Western pfd..	0	....	....	....	....	1.2	1.9	0.4*	35	1.1	
Western Maryland com....	0	....	....	....	....	0.9	0.4	....	57	0.7	Connection with N. Y. Cent. completed. Will help earnings.
Kansas City Southern com	0	0.3	5.4	2.6	3.4	2.2	2.7	0.2	29	0.7	
Wisconsin Central com....	0	1.7	3.2	—0.6	0	2.5	—4.3	0.3	57	0.5	Leased to M., St. P. & S. S. M. (Can. Pac. system).
Wabash, pfd.	0	—5.4	0.9	0.3	—0.5	1.3	—1.2	....	14	0	Now undergoing reorganization.
Toledo, St. L. & West. pfd	0	4.7	6.4	0.2	1.0	2.0	—0.6	....	33	0	Earnings given exclude divs. on holdings of Alton stock.
Missouri Pacific	0	8.1	9.9	3.7	1.3	3.3	—6.3	—2.4	45	0	
Lake Erie & Western pfd.	0	3.1	2.0	—2.0	0.8	—0.2	—0.1	....	38	0	Controlled by Lake Shore.

* Preliminary statement—approximate.

Preferred stocks earning more than the per cent. to which the dividend is limited, but now receiving either no dividend or less than said limit:

St. L. & San Fran. 2d pfd	0	13.2	24.7	1.6	8.2	5.8	8.3	....	37	22.4	Entitled to 4% before com. divs.
Erie 2d pfd..............	0	19.4	24.9	—22.1	6.4	24.3	21.7	9.2	44	20.9	Entitled to 4% before com. divs.
Erie 1st pfd..............	0	10.4	12.3	—3.4	6.1	12.1	11.2	7.0	53	13.2	Entitled to 4%.

Industrials

	Present div. rate.	Earnings on par for fiscal year ending on any date during 1906.	1907.	1908.	1909.	1910.	1911.	1912.	Present price.	Earnings last fisc. yr. on pres. pc.	Notes.
General Motors com......	0	....	....	....	....	....	15.7	17.3	38	45.5	1911 earnings 10 mos. only.
Am. Beet Sugar com.....	5	2.1	1.0	4.2	7.0	7.3	10.9	13.5	70	19.3	
Bethlehem Steel pfd......	0	5.1	10.8	2.4	5.3	13.4	13.6	....	78	17.4	Has about completed large additions.
Am. Malt Corporation pfd	5	2.8	—4.0	10.6	6.2	3.0	8.8	....	63	14.0	Divs. in arrears.
Am. Agri. Chem. com....	4	4.1	6.2	6.1	7.5	10.4	9.1	7.3	59	12.4	
U. S. Rubber com.........	4	4.1	4.4	0.2	4.0	7.8	2.2	6.3	53	11.9	Recently placed on div. basis.
Inter. Harvester com.....	5	5.1	6.5	7.8	17.8	14.8	14.2	....	123	11.5	Excess chgd. to reserve 1911, about 1½% on com. Gov't suit pending.
Colorado Fuel & Iron com.	0	1.7	0.9	0.4	2.1	4.0	3.2	4.8	42	11.4	Pfd. in arrears am't eq. to 4% on com. for 1 yr.
Am. Hide & Leather pfd..	0	1.9	2.2	—0.1	11.2	5.6	0.8	3.2	31	10.3	
U. S. Realty & Improvem't	5	4.8	6.0	7.7	9.2	9.7	9.4	8.3	83	10.0	Controls Geo. A. Fuller Construction Co.
Inter. Paper pfd..........	2	8.9	7.2	7.3	2.7	4.5	5.3	....	59	9.0	Earn. last 6 mo. 1911, 4.6%; 6% cum. div. in arrears.
Union Bag & Paper pfd...	4	7.3	7.0	7.4	6.2	5.4	5.5	5.3	60	8.8	In arrears on 7% cum. div.
Sears, Roebuck com......	7	6.6	8.5	4.5	18.4	20.5	17.0	....	212	8.0	In 1911 p'd a 33⅓% stock div.
Pacific Coast com.........	6	10.1	10.3	5.7	5.3	8.8	7.2	....	93	7.7	Com. and 2d pfd. share equally above 4%.
General Chemical com....	6	7.3	5.7	4.5	14.4	15.6	15.5	....	205	7.6	5% stock div. 1912. 6 mos. 1912 earn. 5.6%
Corn Products pfd.........	5	....	7.2	8.5	8.2	6.9	7.0	6.8	89	7.6	Div. cumulative and in arrears.
Am. Sugar Refining com..	7	....	12.4	7.5	3.9	3.8	9.6	....	127	7.6	1911 earns. exclude $3,450,627 chgd. "improvements."
U. S. Steel com..........	5	14.4	15.7	4.0	10.5	12.3	5.9	....	79	7.5	U. S. Gov't suit pending.
General Electric	8	11.7	11.6	10.2	7.4	16.7	13.7	....	182	7.5	
North American	5	3.2	4.7	4.8	6.0	6.2	6.2	....	84	7.4	Controls St. Ry. and Elec. Light Cos.
People's Gas Light & Coke	7	6.9	7.6	8.4	8.9	9.0	8.9	....	121	7.4	Recently won suit against 80c. gas.
National Biscuit com......	7	7.1	7.6	8.1	7.4	7.7	9.8	10.0	135	7.4	Paid 2% extra on com. last fiscal yr.
Westinghouse Electric com	4	....	....	....	....	7.6	12.3	6.2	85	7.3	Recently placed on 4% basis.
Am. Smelt. & Refining com	4	10.6	12.8	7.0	7.7	7.1	6.3	....	87	7.2	1911, 10.9% including equity in Smelters Sec. Co. earnings.
American Woolen com....	0	3.5	—3.3	—3.9	5.2	2.2	2.1	....	29	7.2	Subject to tariff adjustments.
Inter. Steam Pump com...	0	....	3.7	2.0	1.4	2.8	2.0	....	28	7.1	1911 earns. 2.9%, 18 mos. Fisc. yr. changed.
American Tel. & Tel.......	8	8.2	9.0	10.1	9.0	10.0	10.0	....	143	7.0	Large equities sub. co. earns.; $50,000,000 stk. incr. 1912.
Va.-Carolina Chemical com	3	4.8	5.9	3.7	7.1	10.4	3.1	3.3	48	6.9	Owns Southern Cotton Oil Co.
U. S. Cast Iron Pipe pfd.	4	14.0	14.7	5.4	1.2	4.4	3.9	4.2	64	6.6	Controls 75% of U. S. production.
American Linseed pfd.....	0	....	....	....	5.8	4.5	2.6	....	41	6.3	
Utah Copper (par $10)....	30	....	5.9	23.3	29.5	34.6	39.7	....	$65	6.1	
American Can pfd.........	5	5.1	6.4	6.6	6.7	6.8	7.1	....	123	5.8	Divs. in arrears. Chgd. deprec'n 1911, $2,500,000.
Repub. Iron & Steel pfd..	0	12.2	18.6	9.8	8.1	11.7	9.7	5.1	92	5.5	
Pullman	8	14.7	11.6	9.8	10.9	11.6	9.3	....	168	5.5	
National Lead com........	3	5.3	6.0	5.8	6.2	4.3	3.6	....	66	5.5	
Pittsburgh Coal pfd.......	5	8.1	10.0	1.7	3.0	7.2	5.1	....	96	5.3	Divs. in arrears.
Consolidated Gas (N. Y.).	6	....	3.9	4.9	6.7	7.4	7.6	....	146	5.2	
Western Union	3	5.9	5.0	1.7	5.8	5.7	5.4	4.0	80	5.0	Controlled by Am. Tel. & Tel.
Distillers' Securities	2	6.4	7.8	1.5	2.2	2.3	3.1	1.5	30	5.0	Holds maj. U. S. Ind. Alcohol.
Amalgamated Copper	6	5.9	9.2	4.3	2.4	3.9	3.9	4.3	90	4.8	Div. just increased from 4 to 6%.
Tennessee Copper (par $25)	6	16.5	16.0	6.5	6.8	8.9	8.1	....	$44	4.6	Inc. chiefly from sulphuric acid. Add'l 4% div. Aug., 1912.
Nat. Enamel. & Stamp. com	0	1.7	6.7	—2.1	1.1	1.0	1.1	....	24	4.6	To sinking fund 1911, $114,000, eq. 0.7% on com.
Am. Car & Foundry com..	2	4.5	20.1	23.8	2.6	6.6	7.1	2.5	62	4.0	$600,000 set aside for com. divs.; equals 2%.
American Locomotive com.	0	17.7	18.1	11.1	—3.1	1.3	7.3	0.5	44	1.1	Also mfrs. autos.
Railway Steel Spring com.	0	8.7	8.6	—1.3	5.3	6.0	0.3	....	38	0.8	
N. Y. Air Brake..........	0	....	....	2.4	2.7	4.5	0.5	....	78	0.6	
Pressed Steel Car com....	0	17.2	13.3	—5.8	7.7	5.5	0.1	....	39	0.3	1909, without profit from sale Can. Car Co., earned —5.9%.
Central Leather com......	0	0.4	0.4	1.3	6.3	—2.1	—5.1	....	33	0	Earned 2.7% first half 1912.
Pacific Mail	0	1.4	0.7	—2.1	—1.7	—1.1	—1.0	—0.1	34	0	Contr. by So. Pac. Panama Canal should incr. earnings.
American Steel Foundries.	0	5.9	14.0	0.3	0.1	6.1	—1.5	....	43	0	1911 earns. are 17 mos. Earns. 1st 6 mos. 1912, 0.7%.
American Cotton Oil com..	0	3.8	8.7	3.2	10.4	6.8	—1.2	....	57	0	
Sloss-Sheffield com.	0	5.3	9.9	4.9	6.6	2.0	—0.6	....	58	0	

Monthly Net Earnings

THIS table gives the returns of the principal railroads down to latest dates available, and should be studied in connection with the "Bargain Indicator," which shows annual results.

	Current month.	Change from last yr.	Fiscal yr. to date.	Change from last fisc. yr.	Stock outstanding (in millions).	
					Pref.	*Com.*
Atch., Top. & S. Fe......Aug.	$3,362,010	+$518,916	$6,075,081*	+$1,027,861	114	171
Atlantic Coast Line‡.....Aug.	426,471	+56,219	825,060*	—36,859	...	57
Baltimore & Ohio ....Aug.	2,867,251	+59,051	5.259,662*	+205,763	59	152
Boston & Maine.........Aug.	1,550,696	+373,597	2,784,859*	+788,957	3	39
Buff., Rochester & Pittsb..Aug.	343,704	+70,957	628,102*	+70,810	6	10
Canadian Pacific‡ ....Aug.	4,717,926	+642,355	9,166,103*	+1,387,504	61	180
Central of Georgia.......Aug.	236,370	—7,587	525,305*	+47,034	None	5
Central R. R. of N. J....Aug.	1,476,541	+384,987	2,754,617*	+658,020	None	27
Chesapeake & Ohio......Aug.	1,249,419	+113,083	2,114,254*	+17,611	...	62
Chicago & Alton‡........Aug.	375,969	—43,084	713,442*	—113,278	19	19
Chic., Burl. & Quincy......Aug.	3,313,353	+454,979	5,609,487*	+686,946	None	110
Chic. Gt. Western ....Aug.	383,739	+71,251	659,869*	+95,245	41	45
Chic., Mil. & St. Paul‡...Aug.	2,142,976	+1,057,775	3,869,242*	+1,657,214	116	116
Chic. & Northwestern‡...Aug.	2,876,645	+380,612	4,703,727*	+551,558	22	130
Cleve., Cin., Chic. & St. L.Aug.	1,164,013	+191,044	4,749,974†	+27,721	10	47
Colorado & Southern....Aug.	390,749	—99,773	697,113*	—196,686	1st, 8; 2d, 8	31
Delaware & Hudson .....Aug.	1,076,689	+143,277	5,304,166†	—142,521	None	42
Del., Lack. & Western....Aug.	1,423,062	+173,063	2,667,204*	+304,543	None	30
Denver & Rio Grande‡...Aug.	562,525	—68,115	1,037,035*	—110,427	49	38
Erie‡ ....Aug.	1,808,585	+127,378	3,386,852*	+198,760	1st, 47; 2d, 16	112
Great Northern ....Aug.	3,177,406	+307,410	5,824,196*	+414,020	209	None
Hocking Valley ....Aug.	319,217	+2,068	579,280*	+49,039	None	11
Illinois Central‡ ....Aug.	924,638	—157,602	1,539,403*	—528,237	None	109
Kansas City Southern....Aug.	383,902	+107,706	666,847*	+158,235	21	30
Lake Erie & Western....Aug.	175,995	—6,663	746,686†	+93,408	11	11
Lake Shore & Mich. So..Aug.	2,120,668	+24,244	11,339,499†	+2,023,603	None	49
Lehigh Valley ....Aug.	1,480,439	+263,451	2,880,735*	+556,143	...	60
Long Island‡ ....Aug.	492,123	+59,674	1,669,767†	+181,939	None	12
Louisville & Nashville....Aug.	1,393,754	—48,878	2,495,009*	—175,766	None	60
Michigan Central ....Aug.	996,853	—206,542	6,002,402†	+838,244	None	18
Minn. & St. Louis ......Aug.	228,678	+56,478	419,057*	+135,828	5	15
Minn., St. P. & S. S. Marie‡Aug.	575,594	+20,963	1,073,525*	+19,249	12	25
Mo., Kansas & Texas ....Aug.	862,412	+364,632	1,387,992*	+576,809	13	63
Missouri Pacific ....Aug.	1,552,907	+601,607	3,002,001*	+1,362,029	None	83
National Rys. of Mexico..Aug.	2,155,802	—221,742	3,456,241*	—1,345,826	1st, 57; 2d, 240	149
N. Y. Central...........Aug.	3,307,772	—172,412	17,108,919†	—297,279	None	222
N. Y., Chic. & St. Louis..Aug.	300,353	—51,175	1,888,342†	—21,183	1st, 5; 2d, 11	14
N. Y., N. H. & H.........Aug.	2,794,593	+671,644	5,057,484*	+1.001,733	None	157
N. Y., Ont. & Western‡..Aug.	425,793	+96,597	843,829*	+202,597	None	58
Norfolk & Western......Aug.	1,503,290	+115,964	2,816,941*	+334,443	22	86
Northern Pacific ....Aug.	2,343.439	+35,145	4,440,961*	+229,313	None	248
Pennsylvania R. R.‡.....Aug.	4,413,958	+692,026	26,491,164†	+2,855,420	None	453
Pere Marquette ....Aug.	444,794	—269	763,242*	—17,754	12	16
Pitts., Cin., Chic. & St. L.‡.Aug.	1,131,824	+45,843	6,562,652†	+624,345	27	37
Reading ....Aug.	164,307	—3,930	329,791*	—2.055	1st, 28; 2d, 42	70
Rock Island ....Aug.	2,110,578	+551,319	3,686,909*	+1,029,565	49	90
Seaboard Air Line‡ .....Aug.	420,657	+48,442	784,834*	+19,966	23	37
St. Louis & San Fran....Aug.	1,259,583	+41.594	2,307,903*	+84,391	1st, 4; 2d, 15	28
St. L. Southwestern.....Aug.	354,243	+69,907	720,844*	+203,379	19	16
Southern Pacific‡ ....Aug.	4,786,499	+943,797	8,989,750*	+1,692,711	None	272
Southern Railway ....Aug.	1,842,748	+80,874	3,425,295*	+149,300	60	120
Texas & Pacific..........Aug.	156,539	—205,597	130,441*	—395,636	None	38
Tol., St. L. & Western‡..Aug.	109,880	—16,694	155,006*	—56,165	10	10
Union Pacific‡ ....Aug.	3,835,393	+565,572	7,204,841*	+912,804	99	216
Wabash ....Aug.	953,245	+150,606	1,500,275*	+90,242	39	53
Western Maryland‡ ......June	167,421	—25,251	2,286,625*	—234,656	10	49
Wheeling & Lake Erie....Aug.	336,978	+25,526	589,258*	+60,447	1st, 4; 2d, 11	20
Wisconsin Central‡ .....June	209,178	+102,785	2,522,891*	+715,333	11	16

* Fiscal yr. ends June 30. † Fiscal yr. ends Dec. 31. ‡ Net earnings are after deducting taxes.

Investing for Profit

A Review of General Principles and Practical Methods

By G. C. SELDEN

Author of "Psychology of the Stock Market," etc.

[This series of articles is intended to lay before the reader, in a brief but fairly comprehensive form, the outlines of the basic principles which must underlie all efforts to invest for profit, as distinguished from pure speculation on the one hand, and on the other hand from investment for income only. This branch of investment has been but little discussed, as most writers have turned their attention either to the field of investment for income only, or to the study of the merits of individual securities.]

IV—The Selection of Growing Railroad Stocks

RAILROAD stocks afford the investor for profit what should perhaps be called his best opportunity, when all the various factors in the situation are taken into consideration.

In the first place, the business of a railroad is, of necessity, publicly performed. Its tracks and equipment are visible to everybody, its location is known, the business along its lines can be estimated and often may be computed from current statistics, and evidences of good or bad management are plain enough to any experienced railroad man, and in many cases to the inexperienced likewise.

Again, the system of railroad accounting, as enforced by the Interstate Commerce Commission, is now uniform and definite, so that only a small knowledge of bookkeeping is necessary in order to judge of the prosperity or adversity of a road. An industrial company may put its stockholders off with a brief statement that the gross business for the year was so much and the net profit so much, without any further explanations or details; but the railroad company cannot do this. It is legally required to set forth an intelligible statement of its earnings and condition in a certain definite and prescribed form.

Still another advantage of railroad securities, as compared with others, is that the business of the company is so largely dependent upon growth of population and development of general industry. Even a poorly managed, over-capitalized road will make money in a rapidly growing and prosperous section, while the best and most conservative handling may not avert a deficit in a region where business is stationary or declining.

This matter of population will be the first to be considered by the investor for profit in selecting railroad stock. It is quite true that a good road may, under certain conditions, make rapid progress and build up its income in spite of only a small growth in population along its lines, but the investor for profit wishes to get the advantage of a combination of favorable conditions. He can select any road in the country for his investment. There is no reason why he should not select one where the condition of growth of population is in his favor.

For example, the census figures show that the State of New Hampshire gained only 4 per cent. and Maine 7 per cent. in the 10 years from 1900 to 1910; while Oregon increased 62 per cent., California 60 per cent., Arizona 68 per cent, and Texas 28 per cent. Other things being equal, therefore, the investor for profit would choose a road running through the latter states, as the Southern Pacific, instead of one operating in New Hampshire and Maine—the Boston & Maine. A railroad cannot do a big business unless the business is there to be done.

The next important point to be investigated is whether the business of a road is diversified, embracing a great number of different industries and products, or dependent to a large extent upon a single industry.

The roads report the character of their traffic under six heads, as prescribed by the Interstate Commerce Commission:

(1) Products of agriculture, such as grain, flour, cotton, hay, etc.

(2) Products of animals—livestock, dressed meats, wool, etc.

(3) Products of mines—coal, coke, ore, etc.

(4) Products of forests, that is, lumber and allied products.

(5) Manufactures of all kinds.

(6) Merchandise and miscellaneous.

The ordinarily well informed man generally knows enough about the character of the section through which a road runs to form an idea of the nature of its traffic. With the growth of large systems, most of the roads handle a widely diversified business, so that this subject is not as important as when there were numerous small disconnected lines, each one serving a restricted territory. Even the "grangers," which formerly handled a very large percentage of agricultural products, now carry a diversified business as a result of the increasing prosperity of the farmers and the growth of manufacturing in the sections served.

If a road is largely dependent upon one industry—as for example, Lehigh Valley, nearly two-thirds of whose tonnage is anthracite coal—its prosperity will vary with the activity of that industry. This may be a favorable or an unfavorable feature, according to circumstances. In the 80's, when the price of coal fluctuated violently and the business was generally disorganized, the hard coal roads were at a disadvantage; but in recent years since conditions of partial monopoly have been established in the anthracite industry, the roads have flourished because they participated in the profits resulting from higher prices for coal.

The next question is, Is the road being managed strictly for the benefit of stockholders or is it in the hands of speculative interests? Now that the railroads of the country have been gathered into a few large groups under the control of great banking interests, most investors know the general character of the management of the leading lines, or if they do not, can easily find out.

The days of deliberate wrecking of a railroad, as Erie was wrecked by Gould and Fisk, are undoubtedly over for good and all; but there is a great difference between capable, efficient, economical management, and careless, wasteful methods, or management with one eye on the stock market. Strong banking connections are practically a necessity to a railroad under present conditions. Its income is also materially affected by its relations with connecting and with parallel lines. "Community of interest" often puts a relatively weak road in a position to make money, when it could hardly keep its head above water under strictly competitive conditions.

The fact that a road is controlled by Morgan interests, or financed by Kuhn-Loeb, or is under Hill management, is not, taken alone, a guaranty of success; but other things being equal, the identification of a road with interests having abundant resources and wide influence is to be reckoned as an important asset.

When we come to the question of capitalization, it is little use to figure on the capital issues per mile of road. The question to be considered is, Are the earnings large enough to pay interest on the entire capital and leave a reasonable balance? Where a heavv business must be handled, a large capitalization per mile is necessary; while in a sparsely settled agricultural district, the capital needed may be very much smaller.

It is clear that the amount saved from earnings will depend to a considerable extent on expenditures for maintenance of way and of equipment. A road can make its earnings show a fictitious increase for a year or two by cutting down its normal expenditures for new rails, new locomotives and cars, grading, repairs, etc. Equally, it can include under the heading of maintenance, expenses which have actually been made for permanent improvements, thus causing its earnings to appear much smaller than they would be naturally.

No definite figure can be set for proper maintenance. The necessary expenses for this item vary so greatly for different roads and under varying conditions that the average investor is obliged to depend on the opinions of experts in forming his judgment on this subject. When the annual reports of the principal companies appear, the question of maintenance comes in for careful study by statisti-

cians and financial experts, and the discussions of the subject in leading financial publications generally give the reader a fair idea of the situation. Of course, an actual physical examination of the line by a competent railroad engineer is the best possible information. It is only occasionally that this is available, but nevertheless a knowledge of the real condition of the various roads gradually percolates through financial circles.

Net income, or the amount left over from total receipts, after all expenses of operation and maintenance have been deducted, is of course the main reliance in judging the value of the stock. Net income should always be figured on a per mile basis in comparing results of one year with another, or of one road with another. An increase of 500 miles within any year in the length of lines operated, would naturally increase net income for the system as a whole, but this might not represent any improvement in earnings per mile.

After arriving at net income, the next thing is to deduct the fixed charges, or interest on bonds, notes, guaranteed stock, etc. The amount of this item is always given in the annual report. An issue of new bonds or notes during the year will increase the fixed charges in the next annual report, and to that extent weakens the position of the stock, which cannot be credited with any earnings until after all fixed charges are met.

The sum remaining after fixed charges are paid is called "surplus" and the per cent. of this surplus to the fixed charges is called "margin of safety." If the fixed charges are $20,000 a mile and the surplus above fixed charges is $10,000, the margin of safety is 50 per cent.

Perhaps it is the use of terms like "margin of safety," which sound technical, although the idea they express is exceedingly simple, that leads the average investor to take all his information about conditions and earnings of a railroad at second hand from the newspapers or from circulars of brokerage houses.

In point of fact, it is nearly as easy to figure the earnings on a railroad stock as it is to reckon up your personal cash account. You earn so much in a year, you spend so much, and whatever is left over represents your savings. Just so a railroad has certain gross earnings, certain expenses, a certain amount of interest to pay on its debts, and whatever is left represents surplus, which may be distributed as dividends on the stock if desired by the management.

All these figures are very easily accessible. *The Investor's Pocket Manual* (monthly), *Moody's Manual, Poor's Railroad Manual, Moody's Analyses of Railroad Investments, The Manual of Statistics,* and other similar publications tabulate railroad earnings and expenses so plainly that any one can understand them.

The simplest and clearest way of getting at this subject will be to take some railroad as an example and show just how the investor for profit would have proceeded and why he would have done as he did. We will take a road which has not had an uninterrupted growth, but which has passed through a period of bad management, resulting in the temporary suspension of dividends. We shall thus be enabled to see just what advance warning the investor had which would have permitted him to sell out his stock before the dividends were suspended.

We will select Southern Railway. Taking up first the question of location, we find that this road gridirons the South Atlantic and Gulf states. The last census shows that the value of farm lands and buildings in the 16 Southern states increased from $4,077,000,000 in 1900 to $8,964,000,000 in 1910, or about 125 per cent. The value of farm buildings alone doubled during the decade—a strong evidence of increasing wealth; and the value of twelve leading crops also doubled. Value of manufactured products increased 120 per cent. and total wages in manufacturing industries 157 per cent. Population gained over 20 per cent.

There is no doubt, therefore, that the Southern Railway is located in a rapidly growing section. In regard to the character of its business, the breadth of territory covered assures a diversified traffic. The rapid growth of manufactures is an especially favorable indication in this direction.

Earnings, Prices and Dividends of Southern Railway Preferred.

	Per Mile. Gross Earnings.	Net Earnings.	Surplus.	% Oper'g Expenses.	Earned on Pref.	Paid on Pref.	Price Range of Pref.
1897........	$3,975	$1,278	$93	69.35	0.7%	1%	23-38
1898........	4,305	1,417	205	68.41	1.7%	1%	23-43
1899........	4,695	1,545	388	68.46	3.5%	2%	41-58
1900........	4,952	1,538	463	69.98	4.9%	3%	49-73
1901........	5,252	1,639	536	69.86	5.9%	4%	67-94
1902........	5,592	1,791	533	71.19	6.0%	5%	89-97
1903........	5,941	1,761	520	73.18	6.4%	5%	69-96
1904........	6,297	1,870	584	73.41	7.0%	5%	77-97
1905........	6,688	2,008	717	72.87	8.6%	5%	95-102
1906........	7,274	2,084	709	74.15	8.7%	5%	93-103
1907........	7,507	1,800	303	78.89	3.8%	4%	29-94
1908........	7,072	1,750	102	79.11	0.7%	...	25-63
1909........	7,298	2,337	575	71.83	6.0%	...	60-75
1910........	8,127	2,647	817	70.89	9.6%	...	43-75
1911........	8,569	2,751	948	71.49	11.1%	2%	61-75
1912........	.....	.....	...	.....	.....	...	68-86

The road was incorporated in 1894 under Morgan leadership and that house has continued to be the banking representative of the company.

Now, coming to the question of income, the table herewith shows annual earnings, per cent. applicable on the preferred stock, dividends paid, and range of prices from 1897 to 1912. Gross and net earnings and surplus are shown on a per mile basis.

The only figures that may not be fully understood by all are those under "per cent. operating expenses." This means the per cent. of the total operating expenses of the road to its total gross earnings. These figures are commonly reduced to a per cent. so as to show by comparison whether a road is being economically operated—whether a larger or smaller part of its gross earnings is being eaten up in the cost of handling the traffic.

The attention of the investor for profit would naturally begin to be attracted to this road when in 1899 it earned 3.5 per cent. on its preferred stock against 1.7 per cent. the preceding year, and declared 2 per cent. dividends. Looking into the matter further, he would see that both gross and net earnings were rising year by year, and that the surplus had increased from $93 per mile in 1897 to $388 per mile in 1899. He would also notice that the per cent. of operating expenses to gross earnings had fallen from 69.35 in 1897 to 68.46 in 1899.

All this looked very favorable, and as the road was in a growing territory and backed by strong interests, the investor would be warranted in buying some of the preferred stock, which even with a dividend of only 2 per cent. would return him a satisfactory income on the investment, while prospects of an increased dividend seemed good. The price in 1899 ranged from 41 to 58.

Year by year he would have the pleasure of seeing earnings and dividends increase and prices rise. Up to and including 1902, the only fault he could find would be that the road was paying out nearly all of its yearly surplus in the form of dividends, and was not building up a reserve against the possibility of dull times.

In 1903, there was a falling off in net earnings and in surplus per mile; also the per cent. of operating expenses rose to 73.18, from a low point of 68.41 in 1898. However, 1903 was a somewhat depressed year, when a railroad could not be expected to make the best possible showing, and the decline in net earnings was perhaps no more than would reasonably be expected under the circumstances. A better record would be probable as soon as business recovered its normal activity.

This happened in 1905, and in that year there was also a slight decrease in the per cent. of operating expenses to gross. But in 1906, our investor received a jar. At that time, general busi-

ness was booming. Every railroad ought to be able to make as good a showing as ever it could. Gross earnings for Southern Railway jumped from $6,688 per mile in 1905 to $7,274 in 1906—nearly double 1897.

But net earnings showed only a trifling gain, surplus per mile declined, and the per cent. earned on the stock was only 0.1 per cent. greater than the previous year. Something was checking the growth of net earnings. What was it?

The key was found in the per cent. of operating expenses to gross, which had risen from 72.87 in 1905 to 74.15 in 1906. For some reason the road was not handling its business economically.

The reason was discovered quickly enough by the reader of financial publications of that date. The Southern's train service in 1906 was a joke throughout the states it served. Passenger trains were late, accidents were frequent, and freight moved uncertainly. Yards were clogged with waiting cars, and the inadequate equipment was constantly breaking down. The company had paid out in dividends money which should have been expended for improvements; consequently, when a big volume of business came, it could not be handled satisfactorily or economically.

In the meantime, April 18, 1906, the stockholders had authorized a "development and general mortgage" of $200,000,000 in gold bonds, of which $15,000,000 was to be issued immediately for the "refunding of payments for equipment heretofore made and charged to capital," for advances to subordinate companies, and for double tracking, revision of grades, etc.

The issuance of these bonds showed the pinch the company was in. The price of the preferred stock for 1906 ranged from 93 to 103, or high enough for a 5 per cent. non-cumulative stock even of a thoroughly prosperous company. The investor would take warning. His company had stopped growing. Hence it was time for him to get his money out of it and to place his investment where he might hope for a profit in addition to his interest.

In fact, the investor might well have set his limit at par in the first place, on the principle that 100 was high enough for a stock of that character, in which case he would have got his figure in the previous year, 1905, when the high point touched was 102. In this instance, however, I wish to show how a brief consideration of a few simple figures, available to everybody and readily understood, would enable the investor for profit to perceive the development of unsatisfactory tendencies in the earnings of the road.

In 1907 came the panic, and dividends on Southern Railway preferred were discontinued. This took the stock out of the class adapted to the investor for profit, as his cardinal principle is to get interest on his money first and then to add profits, if possible.

In April, 1911, dividends were begun again, with all conditions affecting this road apparently favorable. Earnings on the preferred had risen from 0.7 per cent. in 1908 to 9.6 per cent. in 1910, and when the 1911 report came out it showed 11.1 per cent. The price range for 1911 was 61 to 75, giving the investor a suitable opportunity to repurchase at a much lower price than he sold, if the investment was to his liking at that time. The high price for 1912, down to this writing, has been about 86, and dividends have been increased to 5 per cent.—the full amount that can be paid on this issue.

(To be continued.)

The Investment Digest

THE sources of items are indicated as follows: *Leading financial and investment publications. †Banking and Stock Exchange houses. §From official sources. Neither "The Magazine of Wall Street" nor the authorities quoted, guarantee the information, but it is from sources considered trustworthy. Owing to the vast amount of information condensed into these pages, many abbreviations are necessary.

Allis-Chalmers.—*Net profit for 7 mos. ended Aug. 31 was almost $50,000. Average monthly sales billed July, Aug. and Sept., were in excess of average of first 5 mos. by 17%. Average monthly orders for last 3 mos. exceeded average of first five mos. by 64%. Unfilled orders Aug. 31, $5,195,669, compared with $3,689,506 on May 31, and $3,453,085 on Dec. 31, 1911. Surplus of current assets, over current liabilities Aug. 31 was $7,328,175, or $198,000 in excess of Dec. 31, 1911. "The foreclosure suits will be pressed and sale as early as practicable." The deposits with reorg. committee to date comprise 93.4% of bonds, 87.7% of pref. stock and 86.7% of com.

Am. Agricultural Chemical.—*The R. R. built to give Co.'s immense phosphate lands in Florida a tidewater outlet, is already handling close to 500,000 tons of phosphate rock yearly, and has in addition built up a handsome freight and passenger business. Another factor which should this yr. count, is prospect of a return on investment in six new fertilizer plants. With more rational selling methods, there is no reason why Co. should not profit by $250,000 to $500,000 from its new plant expansion.

Am. Beet Sugar.—†Earnings are constantly touching new high marks, and it is said by reliable source, to be running at rate of between $15 and $16 per share per an. Co.'s financial position is now stronger than in yrs. In addition, the beet crop promises to be heavy, and of excellent quality.—*The present political situation makes an advance in divs. unwise. Any additional evidence of prosperity is almost certain to be followed by tariff legislation, and without protection domestic sugar makers would face bankruptcy.

Am. Can Co.—*Sept. was best mo. this yr., and Aug. best previous to that. Oct., judging from business thus far, will break all records. With record fruit crop, it will show net $6,000,000 to $7,000,000, compared with $5,400,000 last yr. It is estimated that 1912 will show 16% to 17% on pref., or 11% to 12% on the com. after 5% on pref. Back divs. now amount to about 35%.

Am. Cotton Oil.—*Co. completed fiscal yr. Aug. 31, and statement available in Nov. It is understood that Co. should show 4% or 5% earned on com. stock. 5% would mean $1,000,000, a good showing compared with deficit in previous yr. of $252,105 after payment of pref. div., and deficit after both pref. and com. divs. $758,032.

Am. Car & Foundry.—*Co. has on its books orders for 4 mos. forward business. Oct. is almost certain to see very heavy purchases of equipment. The first of Nov., Co. should have orders for over 50,000 cars on hand, or fully 6 mos. business. Co. is equipped to produce 2,000 cars per week, and plants are now operating at nearer capacity than for any extended period since 1906.

Am. Locomotive.—*Business last quarter was best in several yrs. It is learned that earnings for 3 mos. to Sept. 30, after deducting depreciation charges, interest on notes, etc., and allowing for pref. div., earnings for com. stock were at rate of fully 15% per an. July 1, Co. had unfilled orders of $14,450,000. Bookings on Oct. 1 were about $19,000,000, sufficient to keep plants busy until end of Jan. A good showing has been made by Montreal Locomotive, the Co.'s Canadian branch, which has business booked to keep running at nearly full capacity for several mos. The question of divs. on the com. not discussed, preferring to use earnings in reducing outstanding notes which aggregate $7,600,000. Co. had convertible assets on June 30, $23,783,454, while total liabilities was $15,134,059. The profit and loss balance last fiscal yr. was $9,674,225.

Am. Malting.—*Earnings for fiscal yr. to Aug. 31, 1912, after deducting all charges, amounted to $810,319, or $47,278 more than in 1911. Surplus is equivalent to 5.61% on the $14,440,000 pref., but on pref. of Am. Malt (the holding Co.) it equals 9.38%. of the surplus, however, only two-thirds, or $540,212, is available for divs., owing to the provision, "when a div. is paid on pref., a sum equal to one-half the amount must go into sinking fund for retirement of outstanding bonds," so actual amount available for Malt pref. is 6.20%. The recent declaration at rate of 5% per an. is considered properly conservative. Co. is in excellent financial condition, with working capital of $5,000,000. The detailed balance sheet for 1912 not yet issued.

Am. Smelting & Ref.—*Uncertainty exists in respect to semi-an. statement, as report does not state clearly that it is a consolidated statement of both the Smelting Co. and Securities Co. The balance of $2,383,958 on com. stock,

for six mos. ended June 30, is equal to 4.76% on the $50,000,000 outstanding, or about 9½% for yr. This compares with 10.9% on the com. Dec. 31 last. The falling off in earnings accounted for by political troubles in Mexico.

Am. Sugar Ref.—*Estimated that Co. has in its beet sugar investments, an equity above present book values, between $20 and $25 per share on its own com. Am. Sugar's share in undivided surplus of one beet sugar subsidiary equals over 2% on Am. Sugar com.

Am. Tel. & Tel.—*Figures show striking development of rural sections as contrasted with urban. In 1903 there were 267,000 telephones in rural U. S., an average of but .66 per 100 of population. But in 1912 the number expanded to 3,052,000, or 6.0 per 100, an increase of over 1,000% in actual number of phones, and 809% per capita. In 1903 there was almost 10 times as many city, as rural telephones in this country. But at beginning of this yr., the ratio was 5,079,000 city with 3,052,000 rural phones, or less than 2 to 1. The rural subscriber adds directly to attractiveness of urban residence. Co. will distribute over $25,000,000 in divs. Department of Justice made a thorough investigation of the Telephone situation, and the result was a clean bill of health.

Atlantic Coast Line.—*Co. voted to increase com. stock by $6,000,000. Stockholders will be offered right to subscribe at par for 10% of their holdings. Nov. 19 they will be asked to ratify action. By selling $6,000,000 stock at par, the road will receive amount necessary to subscribe to its share of Louis. & Nash. $12,000,000 stock increase. Coast Line owns 51% of Louis. & Nash. stock. At present price of 142 for Coast Line, stock rights are worth about $3.90 a share.

Atchison.—*Co. reports for past fiscal yr., gross earnings of $107,752,000, which is an increase of $187,000 over preceding yr. Operating expenses were $71,273,000, increase $505,000, so that net earnings of $36,479,000 decreased $317,000. Co.'s surplus for divs., and necessary but unproductive, or only partially productive, expenditures was $19,660,000. Out of this was paid $5,708,000 as divs. on pref. stock, and $10,168,000 on the com., while $396,000 was set aside for fuel reserve, and $3,300,000 appropriated for additions and betterments. Atchison follows policy of putting practically all surplus over div. needs, back into property each yr.

Am. Woolen.—*There never has been a more urgent demand for shipment of goods. All the big mills are running nearly full capacity, and would be operating all looms could they secure help. Co. is employing 28,000 men, but could handle three or four thousand more. The distinct feature is its depleted stock. Co. is carrying practically no stock goods, and can see no prospect of laying by any, so far behind are the big staple mills in deliveries. Present indications are, that the second half yr. will nearly double the first half, which included the disastrous 10 weeks' Lawrence strike. Net income of nearly $5,000,000, equivalent to 12½% on the pref., is expected. This would equal about 11% on the com., after caring for pref.

Bethlehem Steel.—*Pres. Schwab predicts a record output this yr. for all steel cos. He states that all cos. have sufficient orders booked, to keep operating at maximum until Jan. 1, 1913, and premiums are being paid on all classes of steel. In fiscal yr. ended Dec. 31 last, Co. showed net profits $4,392,200, a new high record. It is predicted that net in current year will be in excess of $5,000,000, and balance for divs., after allowing interest and liberal depreciation charges, and 7% on pref., will be $10 per share for the com. In June, July and Aug., net earnings of Chicago Pneumatic Tool Co. were at rate of 12%. Negotiations looking toward absorption of Co. by Bethlehem Steel are still going on, but nothing definite is expected until return of C. M. Schwab from abroad.

B'klyn Rapid Transit.—†At meeting on Aug., Co. failed to increase div. simply because of conservatism; but there is excellent authority for statement that div. will be placed on a 6% basis, not later than Feb., 1913. Territory served showing steady growth, and earnings gradually mounting upward. There has been steady investment buying of the stock. The number of stockholders is now larger than at any previous time in Co.'s history.

California Petroleum.—*Co.'s temporary certificates of pref. stock and temporary voting trust certificates of com. stock have been listed on the Stock Exch. Is a holding Co., organized to acquire not less than 80% of pref. and com. stock, of Doheny-Canfield California Oil Co., Am. Oilfields Co., and Am. Petroleum Co. The California corp. is capitalized at $17,500,000 7% pref., participating as to divs., over 7% paid on the com. in any one yr. There has been issued and listed $12,500,000 pref. and $15,000,000 com. Consolidated earnings of the Cos. for yr. ended Dec. 31, before providing for depreciation, were $1,943,047, and earnings for seven mos. ended July 31, 1912, totaled $1,236,430. Consolidated earnings for next yr. are estimated at $2,300,000. The com. stock has been placed in a five yr. voting trust, and after providing out of earnings for proper development expenses, Co. will be in position to start divs. on the com., at 4% per an.

Canadian Pacific.—†During 1912 yr. 669,639 acres agricultural land was sold for $10,710,143, average $15.99 per acre. In 1911 Co. sold 650,874 acres at average of $14.69 per acre. and now has 11,488,995 acres unsold. *Co. will issue $60,000,000 additional stock at $175 a share. The new issue will be made in Jan., and calls two mos. apart will be made during the yr.

Central Leather.—†Co. is having one of most successful yrs. in its history. Last yr.'s deficit will not only be made up this yr., but surplus will be materially added to, for it is figured that earnings will show 6% on the com. There is not sufficient protection for

the 7% pref., to justify com. stock divs. for some time to come.

Chesapeake & Ohio.—*While Co. handled a larger business in July than for any previous corresponding mo., net earnings were smaller than in either July yr. ago or July, 1910. Judging by Sept. statement, and others of recent mos., it appears to be the intention to devote all earnings over interest and div. requirements, for further upbuilding of property. The div. position is being strengthened, and interests of stockholders safeguarded.

Chicago & Alton.—*Pres. Worthington says: Aug. & Sept. combined, held their own, and fiscal yr. to date shows only 3½% decrease, which I consider fair in view of its handicaps. "It will take two yrs. to get up to requirements. The money secured will be spent in general improvements. We are not ready to buy equipment. We may need 2,000 or 3,000 cars, but the power we have may prove adequate for some time after we get it in good shape."

Chicago Great Western.—*In an. report it is estimated that surplus earnings after fixed charges would amount to $800,000 for coming 12 mos., which, however, would equal only 2% on $41,021,402 pref., and no earning power for the com. stock is in view yet. The 4% per an. divs., on which pref. has a preference, do not become cumulative until June 30, 1914. During past three yrs. $14,000,000 has been spent on property and its equipment. During this period, operating results were unsatisfactory, being impossible to obtain maximum efficiency, while heavy reconstruction work is in progress. This period having passed, the road should reflect the benefits expected from so large an expenditure.

Chicago, Mil. & St. Paul.—*Report for fiscal yr. ending June 30, 1912, shows good reason to feel optimistic. Present figures represent existing conditions, with apparent improvement in earnings of both St. Paul, and its subsidiary, the Puget Sound; and with better facilities for conducting transportation, road should show considerable progress before next an. report. Earnings are showing improvement almost unbelievable. July's gain 41.5% in net income after taxes. Aug. returns show a jump of 87.1%. Should this continue, even reduced by one-half, a substantial surplus in excess of 5% div. would be piled up by June 30 next. Div. requirements for two mos. so far reported were earned two and one-half times.

Chicago & Northwestern.—*Last yr. was one of three bad yrs. in a row. With light freight traffic, consequent upon local crop failures, and hesitation of western jobbers to replenish low stocks of merchandise, the railroads were prevented by severity of winter from reducing expenses proportionately. Co. suffered loss of $2,333,400, or 5%, in freight earnings, offset by $1,100,000 greater passenger and other earnings, leaving net loss in gross $1,200,000. The balance sheet as of June 30 last, shows cash on hand $15,273,687; total working assets $49,055,308; total working liabilities $9,701,820; profit and loss surplus $34,186,372.

Colorado Fuel & Iron.—†Gross earnings for yr. to June 30 reached new high total of $24,268,452, increase $1,333,767, or nearly 6% over 1911. Of this increase, $393,932 was saved for net. The balance after all charges and available for divs. was $1,801,228, on com. stock, after allowing for 8% cumulative divs. on pref. The charter of Co. expires Oct. 21, and provision will be made after that time, for payment of back divs. on pref., which now amount to about 75½%. Co. has a profit and loss surplus of over $4,000,000, equivalent to over $200 per share on the pref.

Crucible Steel.—*Profits available for divs. in first three quarters of fiscal yr. ending Aug. 31, aggregated $2,385,873. For full yr. it is expected net will total $3,250,000, sufficient to pay 7% on the pref., and leave $1,500,000, equal to 6% on the com. Net profits last two quarters, are said to have been at rate of 7% on pref. and 8% to 9% on the com. Earnings for yr. will exceed preceding yr. by $500,000. Improvements recently made, and others contemplated will cost $5,000,000. Co. manufactures high-grade steel of nearly every description.

Denver & Rio Grande.—*With gross earnings a trifle less than in 1911 Co. was able to show only about one-half sum for divs., than last yr. Floods not only suspended traffic for two mos., but caused large expense in repairing damage. When new management took charge, it was found in same condition as other Gould properties, and traffic could not be handled to best advantage. Under the circumstances, a surplus for divs. of $1,126,920 may be considered very gratifying. The new management has accomplished much in the short time given, to rehabilitate the property.—* The Western Pacific began operating July 1, 1911, although not then fully completed, and for fiscal yr. to June 30, 1912, it was hoped that gross revenues might reach $6,000,000. during the first yr., the actual revenues being $5,258,000, which can scarcely be regarded disappointing, in view of difficulties placing in operation, a new main line of length of Western Pac., and developing the traffic.

Distillers Securities.—*Net profits of U. S. Indust. Alcohol for last three mos., are understood to average about $85,000 per mo., or at rate of 5% on the $12,000,000 com., after taking out the 7% pref. calling for $420,000 yearly. Co. has been in position to pay com. div., but general situation with Distillers, does not tempt its payment. In fiscal yr. to June 30, Distillers failed to earn its 2% div. by $160,000. This was a reflection of the "spirit" war. It is understood to have cost Distillers subsidiaries over $500,000 of net profits, and some of its competitors relatively much more.

Erie.—*In May, 1913, "new Erie" will be an accomplished fact. When project is completed, Co. will have six tracks to handle suburban business out of N. Y., thence four

tracks to Port Jervis, and two tracks from that point to Chicago. Grade reductions and elimination of curves will give Co. a ruling grade of 0.2% or 0.3% the entire 999 miles, except 153.4 miles. Erie's grades, will be lighter than the Penn. and N. Y. Cen., or on any other road between N. Y. & Chicago. These will cost $10,000,000 and the money is in hand. The facilities at a conservative estimate, will increase tonnage capacity 50% and permit big economies in operation. The report for last fiscal yr. showed only 7.05% earned on the first pref. against 11.25% in preceding yr. In first two mos. of this fiscal yr., the net has increased $198,760, and if it should continue at same rate in remaining ten mos., the total for divs. will hardly be up to yr. ended June 30, 1911.

Federal Mining & Smelting.*—Purchase of McKay holdings adjoining this Co. is most important in Federal's affairs. The new properties, include a 7-10ths interest in six claims, adjoining Standard mine, the richest of Federal group. The Standard mine is more than 20 yrs. old, and one of the deepest, being opened to depth of 2,200 ft. Federal's fiscal yr., which closed with Aug., is expected to show 7% on pref. Lead is now selling at 5.10c. a pound and silver at 63c. an oz., and the difference means at rate of $500,000 a yr. If improved metal situation continues, Federal will earn 11% on pref. Co. is now paying 6% on pref., but as it is the expressed policy to make divs. correspond closely with earnings, the prospect for a larger return on pref. is good.

General Electric.—*Co. is doing largest business in its history and gross business for current yr. will be $95,000,000 including all Cos. Co. is employing 50,000 men, the largest in its history. The proceeds from recent bond issue will be used for working capital. Including proceeds from these bonds, Co. will have on hand between $20,000,000 and $25,000,000 cash.

Great Northern Ore.—*This yr. promises biggest business in history. Not only will U. S. Steel Corp. mine and pay for its 1912 complement of 4,500,000 tons, but it will make up deficiency of 1909 and 1910, which will release almost $3,000,000 now held by agents of the Ore properties.

Harriman Lines.—*It is understood that car loadings in Sept. have shown remarkable increases over a yr. ago, and it is probable there will be a considerable scarcity of cars before close of Oct. The volume of tonnage is exceptionally heavy. In Oct. the crop moving period will assume very large proportions, and this with the other products, will tax the lines of the system to the utmost. At present large amounts of money are being expended.

Hill Roads.—*Appraisers are now at work, making physical valuation of Colo & So., report will be ready after first of yr. Those in touch with Hill people look to see its absorption by Burlington. In turn, Burl., according to plans, will be drawn more closely to Gt. Nor., and probable final step will be an acquisition of a line to the Atlantic. Gt. Nor. has already been equipped for this purpose by creation of the $600,000,000 mortgage, under which $20,000,000 4¼s were issued a yr. ago. How much Gt. Nor. must pay for Nor. Pac.'s half, has been placed at $50,000,000, meaning $290 per share for Burl.'s $110,839,100 stock. Burl. today may be regarded as a 15% earner. Thus, at $290 or $300 per share, the transfer of Nor. Pac.'s interest in Burl. to Gt. Nor. would be on a 5% income basis. Gt. Nor. and Burl. in yr. to June 30 last, earned net $54,000,000, each contributing $27,000,000 in round numbers, showing a surplus for Gt. Nor., after deducting all charges incurred through acquisition of Nor. Pac.'s interest, $25,800,000, or equivalent of about 12.3%. The linking of Erie and Gt. Nor. is highly probable sooner or later. When control of that road passes, it will be through negotiation with the Morgan First Nat. Bank, who in addition to holding ruling voice in Erie, are heavily interested in Hill and his properties. First of all, however, holders of Colo. & Southern pref. will probably be considered.

Illinois Central.—*Pamphlet report for fiscal yr. ended June 30 shows Co. earned 3.17%. The business during yr. shows material decrease compared with previous yr., the latter being the largest in history of Co. The principal reasons for decrease were a strike which continued for several mos.; an unusually severe winter seriously affected movement of traffic, and floods on the So. lines interrupted traffic and caused large increase in operating expenses.

International Paper.—*Net earnings for 1912 are expected to be about $3,000,000. Co. now owes about 16%, or $3,600,000 in back divs. Co. has spent a great deal of money in improving property during past five yrs., but has a profit and loss surplus of $9,000,000 Declaration of 4% on pref. would call for $896,268.

Kansas City So.—*To June 30, the decreases due to labor troubles and extremely unfavorable weather in lumber districts, and to epidemic of meningitis, probably amounted to $420,000 which will naturally be restored. The estimated decrease due to construction of pipe lines was $498,000, which can be restored only by development of new oil fields. These decreases amount to $918,000, while total net decrease is $722,315. The general improvement and development of property was prosecuted vigorously. Funds for this purpose were provided by issuance of $15,000,000 ref. and improvement bonds. The balance sheet of Co. and its subsidiaries showed a profit and loss surplus on June 30 last, of $4,352,907.

Louisville & Nashville.—*Stockholders of record Nov. 7 may subscribe at par, in ratio of 20% of holdings, to the $12,000,000 new stock recently authorized. Subscriptions payable $20 per share at time of subscription, not later than Dec. 16, and $80 per share on or before Feb. 10, 1913. Right to subscribe will cease Dec. 16. Warrants will be received for subscription only in amounts which entitle

holders to full shares. Therefore, holders of fractional warrants may either sell or purchase others in open market.

Minneapolis & St. Louis.—*Last yr. Co. was hard hit by light grain shipments, but since close of past fiscal yr. business has improved. For some time Co. has been paying particular attention to equipment and rolling stock is now in much better shape than last yr. The an. report for yr. will probably show a deficit after charges of over $100,000. Co. will have to do some financing, and it is likely that some of the $75,000,000 ref. 5%s authorized last yr. will be sold.

Minn., St. Paul & S. Ste. Marie.—*In fiscal period ended June 30 Co. earned for com. stock more than three times that of 1911 yr. Gross revenues in 1912 increased 30%, and net advanced 58%. In Soo's 1912 report, remember that 1911 was a very poor yr. In 1911 "Soo" put into operation 235 miles of new line, which naturally increased cost of operation. As result of this, with declining gross, the operating ratio jumped more than 10 points, or from 52.7% to 63.8%. In the late yr. this ratio was reduced to an even 56%.

Mo. Pacific.—Results accomplished by Pres. Bush have exceeded most optimistic expectations. Net returns have been subordinated to physical needs of property, and Mo. Pac. has been brought to state of efficiency, and handle traffic with profit. A yr. ago transportation cost 43% of gross; it now costs but 37c. to move a dollar of business. In Aug. gross increased $852,500, or 18%, and net increased $672,900, or 85.6%. The road is now earning a surplus after fixed charges at rate of $2,000,000 per an.

Missouri, Kan. & Texas.—*In last fiscal yr. road did not earn 4% on its $13,000,000 pref. With return to better earnings there is no question of continuance of the 4% rate on pref., and the regular semi-an. declaration of 2% will be made later in the current mo. Gross in the first two mos. of current fiscal period increased substantially and operating expenses were under better control.

National Lead.—*On matter of earnings, officials confine themselves to statement that earnings are very satisfactory, so it is evident that this yr.'s net on com. will show an increase over last yr., as the broadening demand in last few mos. has materially eased the situation. Co. started current yr. with largest manufactured stocks in its history. At present they are all wiped out and Co. is far behind, struggling hard to catch up to orders on its books.

N. Y. Air Brake.—*Pres. Starbuck says: So far this yr. increase in sales compared with same period 1911 has exceeded 100%. 1911, however, was extremely poor. Directors decided to wait until yr.'s results are known, and not likely to act on div. before Nov. meeting During 1911 Co. kept up div. rate of 1½% quarterly longer than conditions warranted, in hope that business would improve. At present they incline toward the other extreme. In 1911 earnings were less than $50,000 while div. payments were $450,000. This yr. Co. has had to make up the 1911 deficit of $400,000, and get a substantial surplus before resuming divs.

N. Y. Central.—*Co.'s earnings, which were running behind div. requirements well into latter half of current yr., have now caught up, and for 8 mos. ended Aug. 31 a small surplus was accumulated. For six mos. to end of June, Cen. ran behind div. requirements by $1,200,000. It follows, therefore, that with a surplus of $600,000 to close of Aug. the road is now accumulating earnings in excess of divs. at rate of $900,000 per mo. Co. earned a balance of $15,300,000, or 6.87%, for its $222,724,400 stock in 1911. Assuming that loss is not recovered up to yr.'s end, Cen. should easily produce 6¼% for its stock in 1912.

N. Y., New Haven & Hartford.—*The figures published showing failure to earn 8% divs. by $929,989, cover results of railroad proper, operations of street railway and steamship investments, but only as these properties have made cash distributions on their stocks held by parent Co. Previous statement, last Aug., showed that system earned charges and div. requirements at the 8% rate, on all stock in hands of the public with a surplus of $305,-835. Co. operates 2,000 miles of R. R. and owns $250,044,246 of securities in other Cos. In addition to being an operating Co. it is a quarter-of-a-billion-dollar holding Co. The earning power is to be derived from the system as a whole, rather than from the parent Co. itself. Almost a third of N. H.'s surplus is made up by "other income," or divs. and interest declared on securities in its treasury.

Northern Pacific.—*In the two mos. of current fiscal yr. Co. has shown gains in both gross and net. July net gained $147,167, equal to 8.7%. Aug. increased slightly, $11,435. Thus, the two mos.' net shows increase of $158,603, totaling $3,928,380, compared with $3,769,777 in first two mos. of 1911-12 yr., a gain of 4.2%. Officials believe that they are facing a large business. 1912 fiscal yr. as a whole, Co. owes its increase to freight business. Passenger traffic continues to show declines, on account of competition of Puget Sound line, which took business away at rate of $10,000,000 per an. (See Hill Roads.)

Norfolk & Western.—*Pamphlet report for fiscal yr. to June 30 has been issued and shows that additions to cost of road and equipment during yr. was $6,866,693. From commencement of operations 1906, to June 30. 1912, Co. expended for acquiring or constructing lines, branches and extensions $95,731,439. of which $68,419,917 was from sales of capital obligation and $27,311,522 from revenue. The report states that production of coal during the yr. from lands leased to mining Cos. by the Pocahontas Co. was 11,290,039 net tons, an increase of 1,993,467 tons, or 21.44%, over previous yr. About 75,028 tons were consumed at mines, and 1,015,617 tons converted into coke. From these lands Co. received for shipment 9,363,456 tons of revenue coal.

Interborough.—*Pamphlet report "Inter. R. T." for fiscal yr. to June 30 shows: For first time gross crossed $31,000,000, while net exceeded $18,000,000. Notwithstanding payment of regular divs. at rate of 10% and an extra of 5%, Co. shows surplus of $1,250,000, compared with about $1,650,000 in yr. previous, when but 10% in divs. was paid. At close of last fiscal period Co. had working balance of $6,700,000, and a profit and loss surplus of $8,531,000. In fiscal yr. to June 30, "Inter. Met." earned surplus of $1,788,000 for divs., equivalent to $3.90 per share of pref. In addition to regular divs. of 10% received on Inter. R. T. stock there was included a 5% extra div. and an extra 1% for yr. to June 30, 1911, making 16% in divs. received by Inter. Met. during yr. on Inter. R. T. stock. These divs. amounted to $5,426,048, interest on loans, and advances to Met. Securities Co. brought total income up to $5,753,830. Disbursements for yr., $3,628,523, which left a balance of $2,127,-307. Co. failed in its statement to make provision for sinking fund on $67,825,000 4½% coll. trust bonds of $340,000 an., making for divs. $1,788,000, or 3.9% on pref. Inter. R. T. made gain in gross for first quarter to Sept. 30, of $435,800, at rate of $1,750,000 per an., which is 5½% over last yr. 70% of gain in gross is being saved for net.

Pennsylvania.—*Aug. figures show that prosperity has not abated. Aug. closes two-thirds of Penn.'s yr. The earnings of Penn. Co., owned absolutely by Penn. R. R., must be considered. To end of Aug. upkeep of Co. was increased by $2,633,000, while net gained $681,000. Maintained on same basis as last yr. the Penn. Co. could show at least $6,300,000 over its div. requirements to Aug. 31. Penn. R. R. including the Penn. Co. equity, earned 8.2% for its $453,818,850 stock in 8 mos. to Aug. 31, compared with 5.8% in same period last yr. Add to this undivided surplus produced by Penn. Co. last yr. and Penn. R. R.'s balance will surely exceed 10% on the $453,-887,850 stock outstanding.

Pittsburgh Coal.—*Earnings are large enough to fully cover the 7% div. on pref., but not probable that div. will be increased from present rate of 5%, on account of plan retiring pref. with a bond issue, now being considered. Co. is short of cars and labor, making it impossible to run mines at full capacity; demand for coal has greatly increased. Lake shipments alone this yr. will run over 6,000,000 tons, more than a million tons above last yr. Last yr. Pitts. Co. mined 16,000,000 tons. Since that time control has been secured of the Monongahela Co., which mined last yr. about 12,000,000 tons. In 1911 the first mortgage debt was reduced $9,253,000, thus reducing fixed charges. Co. began yr. with working capital of $4,306,403; the undivided earnings Dec. 31, 1911, were $8,481,500. Negotiations looking to recapitalization of Co. and liquidation of back divs. are still in progress.

Reading.—*The railway gain of $735,000 gross meant 20% more business than in Aug., 1911, while gain in net of $670,000, was 65%. Phila. & Reading earned half again as great profit in Aug. this yr. as last. Gains were even more striking for the Coal & Iron Co., which did 73% more business in Aug. than same mo. 1911, while net was $327,000, against a deficit in Aug., 1911, of $212,000. The surplus of all Reading Cos. over charges and taxes for Aug. was $1,408,000, against $214,800 last yr. For two mos. this surplus was $2,377,900, against less than one-fifth as much in 1911. This yr.'s surplus is four or five times as great as that of same two mos. in any recent yr. One of Reading's subsidiaries is Reading Iron Co. Its assets exceed total liabilities by more than $14,200,000. Last yr. Reading received only 6% in divs. on the $1,000,000 total stock of this Co. In 1911 the Iron Co. declared a 100% cash div., in addition to usual 6% div.; in 1910 it paid $925,100 cash for its proportion of $4,000,000 increase in Penn. Steel pref. stock, of 9,251 shares, giving it ownership of 70,922 shares of Penn Steel pref. and com., all purchased from earnings of Reading Iron Co. In 1909 Iron Co. declared an extra cash div. of 150%, in addition to regular div. of 6%. In previous yrs. only 6% was paid.

Railway Steel Spring.—*For first time in three yrs. plants are operating at highest possible capacity. Co. has sufficient orders on books to run at this rate for three mos. The fiscal yr. is same as calendar yr. The report for last yr. showed net $1,217,015, compared with $1,950,900 for 1910. For 1912 this will be passed by comfortable margin. Increased earnings will mean divs. on com. stock in a reasonable time.

Rock Island.—*July's gain of $450,000 in net after taxes was good, but Aug.'s has been better, and Sept.'s gain is reported good. July and Aug. increased net $980,000 over same mos. last yr. This gain in net after taxes in first two mos. promises big things for fiscal yr. to end June 30, 1913. In Aug. Co. did the largest business in history of Co., exceeding 1911 by $850,000. For July and Aug. the best gross earnings for those two mos. was reported exceeding 1911 by nearly $1,500,000, and best previous yr. by $922,000.

Seaboard Air Line.—*Although gross revenues for fiscal yr. to June 30, increased 5% over preceding yr., net, after expenses and taxes, decreased 12%, and surplus after all charges, decreased 50%. Co. in past yr. earned 3.59% on pref., as compared with 7.59% in preceding yr., and this taken together with unsatisfactory financial condition at close of yr. makes it evident that any div. on pref. in near future is unlikely. Co. has much to do yet before divs. can be inaugurated on a permanent footing.

Sears-Roebuck.—*Sept. gross amounted to $5,176,127, a gain of $550,457, or 11.9% over Sept., 1911, but a decrease of $475,303, compared with Aug. this yr. Including Sept. the monthly increases in gross over last yr. averaged 23.8%. With three-quarters of yr. gone Co.'s sales foot up $55,098,292, or $10,-618,508 higher than for first nine mos. of 1911.

Southern Pacific.—(See Harriman Lines.)

St. Louis Southwestern.—*The report states that freight revenue increased $104,268, or 1.18%, during yr. Excellent cotton and grain crops, together with improved business generally, resulted in slight increase in tonnage movement as a whole, notwithstanding substantial decrease in tonnage of products of mines and forests. Passenger revenue shows decrease of $92,154, or 3.85%, attributed largely to flood conditions.

Southern Railway.—*In view of directors increasing div. on the pref. from 4% to 5% (all that stock is entitled to) it is not surprising that the 4% development and general mortgage bonds should have become one of most active issues on the list. Even on basis of 1912 earngs., after $3,000,000 is distributed in divs. on $60,000,000 5% non-cumulative pref. stock, $4,000,000 will remain to strengthen the $61,333,000 development bonds.

Tennessee Copper.—†Co. makes a most satisfactory showing, 1912 will be the biggest yr. ever experienced. Based on results so far, Co. should close yr. with net profits of $1,250,000 after depreciation, retirement of bonds and all expenses. Sept. will be record breaking. Copper production is now at rate of 18,000,000 lbs. a yr. Acid production is now 550 tons per day. At present metal prices it means additional earngs. of $200,000 per an. Estimated earngs. of $1,250,000 are slightly more than $6 per share.

Twin City Rapid Tran.—*Aug. statement showed improvement over a yr. ago about $45,000, or 6¾%, the net rose $8,300, or 2¼%, while surplus over charges and pref. divs. increased $5,300, or 2½%. The Co. is a little more than holding its own. Surplus over charges and taxes for the 8 mos. to Aug. 31, were equal to 7.25% on the $20,100,000 com. stock, or at annual rate of 10.80%. During same 8 mos. of previous yr. Co. earned same amount.

Union Bag & Paper.—All Co.'s plants running at full capacity since beginning of yr. For first 8 mos. of current fiscal yr. it is said that earngs. on the 7% pref. have been at the rate of about 10%. This means that if maintained the current yr. will be its best. From organization up to 1906 the full 7% div. was paid on pref., which is cumulative; in 1906 rate was reduced to 5½%, since then only 4%. Since 1906 18¾% has accrued. The property is now in good shape, and profit and loss surplus Jan. 31, 1912, was $1,921,788.

U. S. Cast Iron Pipe.—*Since first of current fiscal yr. which started with June, earngs. have shown heavy improvement over last yr. For first four mos. ending with Sept. earngs. will be larger than any six consecutive mos. last yr. Co. is operating at 100%, and has orders for four mos. on its books. Prices for pipe are from $3 to $4 a ton higher. At end of last fiscal yr. Co. showed $527,978 net, and with present conditions governing, this should be increased to at least $1,000,000. In June of this yr. Co. declared a 4% div. on pref., which is non-cumulative, hence there will not be any accumulation to be paid off.

Union Pacific.—(See Harriman Lines.)

United Fruit.—†Sept. 30, Co. ended a very successful yr. The official report not yet issued, but we can estimate results. From present indications earngs. should be equal to over 20%. Co. produced about 245,000,000 lbs. of sugar, a 30% increase over last yr., and as price of sugar has been high, it is safe to say that net earngs. from that department alone have been $1,500,000. In May and June the net from fruit importations amounted to $2,000,000. It is likely that profits from both fruit and sugar will total $6,000,000. With the property purchased Co. will produce on its own plantations 80% of its fruit. The area of agriculture lands held will this yr. be about 900,000 acres, compared with 504,824, 1911.

U. S. Motor.—*It is understood the assessment on $23,700,000 combined pref. and com. stocks has been underwritten by a powerful syndicate. The assessment should give Co. a trifle over $5,000,000 cash, which with $1,500,000 cash in treasury, will permit payment of $2,000,000 merchandise claims in cash, and leave $5,000,000 new money for working capital. The reorganization eliminates all bonded or floating debt and leaves entire net earngs. for the three classes of stock.

U. S. Steel.—*Excess tonnage in Sept. averaged 15,500 tons a day; bookings were that much in excess of shipments. Assuming that shipments were at rate of 42,000 tons a day, incoming orders for Sept. must have averaged 57,500 tons a day. Co. now has on its books more unfilled tonnage than at any time since June 30, 1907, when 7,603,878 tons were reported. The unfilled tonnage on Sept. 30, was 6,551,507 tons, an increase of 388,132 tons compared with that on Aug. 31. A man engaged in steel business and in close touch with affairs of various Cos. says: "The steel plants are doing such a business that it is impossible to get work turned out before spring. Recently a bonus of $5 per ton was offered on 800 tons of structural steel if it could be delivered in ninety days, but this was refused with statement that Co. could not guarantee delivery until Mch."

Virginia Iron, Coal & Coke.—*Pres. Newton in annual report says: "Within past sixty days the iron market has shown marked improvement, and there is a strong demand for iron at remunerative prices. We have orders on books for 62,000 tons of iron, for delivery before Jan. 1, and booking a fair tonnage daily for delivery during first 3 mos. of 1913." Coal business has shown great improvement. Mines produced 1,563,284 tons of coal, at profit of $308,419, against preceding yr. of 1,404,638 tons, at a profit of $226,698. Although charged during last yr. $83,778 for depreciation of coal lands, and $45,696 for depreciation of improvements, the value of coal lands has increased several times that amount.

Wabash.—*Gross revenues for third week of Sept. increased $90,000, a gain of 15%. For

4th week, loaded car movement reached 8,000 cars a day, or 1,000 above normal. Co. is now carrying heaviest traffic in its history, even with fifty to sixty work trains interfering with operations and 1,500 cars out of revenue service and hauling material. About 80 miles new second track completed. New equipment ordered, coming slowly. Of 700 cars ordered, Am. Car & Foundry will soon commence delivering 30 or 40 per day. None of the 750 automobile cars have been delivered. The 20 locomotives will be received Dec. 1. Structural steel deliveries are far behind and is seriously interfering with double tracking.

Wabash-Pitts Terminal.—*For July last combined earnings of Terminal property and West Side Belt show increase of 21.23% over same mo. a yr. ago, and net shows unprecedented increase of 51.10%. The increases over June were respectively, 10.71% and 25.53%. The first signs of encouragement holders of securities have had in many a mo. Better operating arrangements made in July with Wheeling & Lake Erie for interchange traffic has permitted this improvement. It is said that Aug. results will show still larger improvement. In fiscal yr. ended June 30, Terminal proper earned only $19,000 over expenses and taxes, equivalent to about one-twentieth of one per cent. on cost of the property.

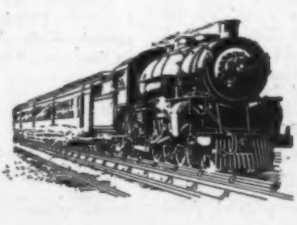
Western Maryland.—*For yr. ended June 30, Co. will show only $100,000 in excess of its 4% pref. divs. This is due to light coal traffic, which makes up 62%, and management working for heavier business expected in view of opening new extension to connect with Pitts. & Lake Erie at Connellsville. N. Y. Cen. lines are expected to turn over large amount of traffic, as officials of that system have assured W. Maryland officials they will turn over all traffic the new line can handle.

Westinghouse Air Brake.—*Co's subsidiaries are generally in prosperous conditions. Canadian Westingh. paid 8% divs. on $4,376,000 stock, and credited $524,231 or 12% additional to surplus and reserves. The Co. paid 20% in divs. Co. reports for yr. ended July 31: Net sales $9,977,236, compared with $8,036,193 last yr., with net earnings from all sources $3,889,073, an increase of $854,842, or 22% over previous yr. As usual, liberal charges have been made, leaving net profit $3,676,161, which added to balance carried forward July 31, 1911, made total surplus $10,731,055. Out of this surplus Co. paid during yr. cash divs. 20%, and July 10, 1912, a stock div. of 33⅓%, leaving July 31, 1912, $3,398,214.

Westinghouse Electric.—*Co. declared quarterly div. of 1% on com. stock, and regular quarterly div. of 1¾% on pref. The action means that Co. is established on a 4% basis and will continue so. If it is accepted that Co. will earn 15% on the com., the balance will be about $5,200,000. Payment of three quarterly divs. of 1% for fiscal yr. ending March 31, 1913, would require about $1,050,000, leaving $4,150,000 available in Co.'s business. The reserve of such amount should place financial position on the most solid basis. Co.'s foreign investments are now such that a further charge off of $2,000,000 at the outside, would put book valuation on a sound basis. Already $7,000,000 has been written off the original book value of foreign subsidiary stocks.

Wheeling & Lake Erie.—*Co. has not purchased a new locomotive in seven yrs., nor any new equipment. It has been "scrapping" old and worn-out equipment, so that at close of yr. it had 39 less locomotives than five yrs. ago, and 1766 fewer freight cars. Equipment retained has, however, been kept in good repair, and Co. has got nearly 40% more service than old management with more units. During four yrs. of receivership only $4,190,000 receiver's certificates were sold, and the only new money secured in that period; $700,000 went to additions and betterments, $1,000,000 into rehabilitation, $1,700,000 for general improvements and $764,000 to pay interest, taxes and bankers' commissions. In 4 yrs. cost of additions and betterments and charged direct to income was $1,696,000. The question of freeing Co. from court control under receivership has not yet come to a head. Under receivership there has gone into property $6,000,000 and condition greatly improved.

Woolworth.—*Co. shows steady improvement. Sales 15% larger than last yr. and officials anticipate $60,000,000 business this yr., compared with $52,616,000 in 1911. Co. makes 10% profit on gross sales, so that $60,000,000 business would mean net of $6,000,000. This would equal between 9% and 10% on the $50,000,000 com. stock, after deducting 7% on $15,000,000 pref. Since Jan. 1, Co. has acquired control of additional 30 stores in the U. S. and 10 stores in England. Co. now has under one control a chain of over 600 stores. Earnings for 9 mos. to Sept. 30, totaled $39,931,643, against $34,865,525 for same period last yr., a gain of 14.53%. Sales for Sept. totaled $4,730,140, against $4,466,696 yr. ago.



Mining Stocks

This section of the Investment Digest includes some of the more important properties, in regard to which authentic and trustworthy information has appeared during the month.

Anaconda-Amalgamated.—†Anaconda has increased div. rate from $2 to $3. At the $3 rate, Anaconda is disbursing nearly $13,000,000; of this, about $9,500,000 goes to Amalgamated, equivalent to about $6 per share for latter's 1,500,000 shares. Co. must be earning 8c. a lb. on production of about 275,000 lbs. This is equivalent to $22,000,000 an., or 75% in excess of div. requirements. —*The income from Anaconda stock, and from other Co.'s controlled, equal between $10 and $11 a share. Amal. since organization in 1899, has paid to shareholders $72,000,000, equal to almost one-half its capitalization. The average div. amounts to $5.50 per share. Amal. declared a div. for the quarter at rate of 6% a yr., an increase of 2%.

Chino.—*The Aug. production of 3,600,000 lbs. was produced at small fraction above 6c. The combined July and Aug. production at flat 6c. cost, so that on 6,700,000 lbs. for these two mos. Co. must have made about $785,000, or at rate of $5 per share.—†Sept. output was 3,549,862 lbs., showing a gain within three mos. of about 150%. This is the most rapid increase in production at any property of importance. The three mos.' output ran about 10,300,000 lbs., so that actual profits, figuring on 17¾c. basis, were 11½c. For yr. 1912, Co. will probably show $3,300,000, on production of 30,000,000 lbs., sold at average of 16c., equivalent to about $4 per share, including stock held for conversion of bonds.

Calumet & Hecla.—*Combined production of Cal. & Hecla properties for first eight mos. of current yr., totaled 87,641,362 lbs., a reduction of 1,132,625, or 1.27% from corresponding period previous yr. The managers are making every effort to increase production to take advantage of higher metal market, but are handicapped by lack of labor. Production in Sept. 10,327,071 lbs., against 10,780,004 in Aug. and 10,596,233 in Sept., 1911.

Goldfield Consol.—*The decline in net earngs. during recent mos. would seem to indicate that Co. cannot long continue to pay even present rate of div. The rate of 30c. per share now, calls for $4,677,000 per an. or $389,000 per mo. Not since Apr. has net been near this figure, and in that mo., but $2,000 was shown over present requirements. Aug. profits of $231,000 being smallest in many mos., comparing with over $500,000 Dec., 1911. On Aug. 31, Co. completed tenth mo. of fiscal yr. which ends Oct. 31, and during the period paid in divs. about $700,000 in excess of net. On Oct. 31, last, consolidated balance sheet showed a surplus of quick assets of about $2,150,000. Surplus at present is about $1,450,000. Pres. Wingfield in Oct., 1911, said, that it was intended always to maintain a surplus of $1,000,000.

Miami.—†Production for Sept. was 2,949,150 lbs., about 100,000 less than Aug. For 1912, Co. should produce about 33,500,000 lbs.; that is, in its first full yr. of operations, Miami should earn about $2,500,000, equivalent to about $3.30 per share, a remarkable record for any new producer. Co. must be earning very close to $4.00 per share.

North Butte.—*Co. is today earning about $5 per share, and paying $2. The recent accumulation of over 30,000 shares in a fortnight indicates much higher prices. The richest ore body struck since 1907 has been on the 2,800-foot level. Samples from vein, run from 10% to 13% copper while many "grab" samples run as high as 40%. A well-known mining engineer says: "This is the most notable strike ever made in Butte." When rich copper ore is found at such a depth, it confirms evidence uncovered in the Anaconda.

Utah Copper-Nevada Con.—†In Aug. Utah Copper made the greatest production in history of Co. turning out 11,841,044 gross lbs. Allow for smelter losses, would indicate net production 11,248,950 lbs., or 135,000,000 lbs. per an. At cost of 7½c. per lb., crediting earngs. from Bingham & Garfield Ry. would indicate earngs. of $13,837,500 per an. Utah owns slightly more than one-half of Nevada Con.'s stock, and at present rate of production and earngs. Utah's equity would amount to $3,870,000, or total earnings of $17,700,000 per an., equivalent to $10.90 per share of Utah stock. Utah is now paying divs. of $3 per share.—*Running full, Nevada Con. can produce 85,000,000 lbs. a yr. On this production, Co. can earn $5.10 a share.

Copper Notes.—*Monthly statement of Copper Producers' Asso. for Sept., compared with Aug. and Sept., 1911, figures in lbs.

	Sept. 12.	Aug. 12.	Sept. 11.
Stocks prev. mo.	46,701,374	50,280,421	133,441,501
Production	140,089,819	145,628,521	115,588,950
Total	186,791,193	195,908,942	249,030,451
Dom. deliv......	63,460,810	78,722,418	57,311,584
Exports	60,264,796	70,485,150	50,824,011
Total..........	123,725,606	140,207,568	108,135,595
Stocks remain...	63,065,587	46,701,374	140,894,856

TRADERS DEPARTMENT

SPECULATION: Operations wherein intelligent foresight is employed for the purpose of deriving a profit from price changes.

Rules of a Successful Speculator

[The rules here laid down were written and followed by Dickson G. Watts, one of the shrewdest and most successful cotton speculators this country has ever known. They apply with equal force to all markets. Although promulgated years ago, this is still recognized as a masterpiece on the subject of speculation. It was published in one of the early numbers of this magazine, and is reprinted here in response to numerous requests.]

THE following "Universal Laws" are applicable to speculation as conducted on the exchanges of this country.

These laws are two groups: Laws absolute and laws conditional.

LAWS ABSOLUTE.

1. Never overtrade. To take an interest larger than the capital justifies is to invite disaster. With such an interest, a fluctuation in the market unnerves the operator, and his judgment becomes worthless.

2. Never "double up"; that is, never completely and at once reverse a position. Being "long," for instance, do not sell out and go as much "short." This may occasionally succeed, but is very hazardous, for should the market begin again to advance, the mind reverts to its original opinion and the speculator "covers up" and "goes long" again. Should this last change be wrong, complete demoralization ensues. The change in the original position should have been made moderately, cautiously, thus keeping the judgment clear and preserving the balance of mind.

3. "Run quick" or not at all; that is to say, act promptly at the first approach of danger, but failing to do this until others see the danger hold on or close out part of the interest.

4. Another rule is, when doubtful reduce the amount of the interest; for either the mind is not satisfied with the position taken, or the interest is too large for safety. One man told another that he could not sleep on account of his position in the market; his friend judiciously and laconically replied: "Sell down to a sleeping point."

LAWS CONDITIONAL.

These rules are subject to modification, according to the circumstances, individuality and temperament of the speculator.

1. It is better to "average up" (pyramid) than to "average down." This opinion is contrary to the one commonly held and acted upon; it being the practice to buy and on a decline buy more. This reduces the average. Probably four times out of five this method will result in striking a reaction in the market that will prevent loss, but the fifth time, meeting with a permanently declining market, the operator loses his head and closes out, making a heavy loss—a loss so great as to bring complete demoralization, often ruin.

But "buying up" is the reverse of the

method just explained, that is to say, buying at first moderately and as the market advances adding slowly and cautiously to the "line." This is a way of speculating that requires great care and watchfulness, for the market will often react to the point of average. Here lies the danger. Failure to close out at the point of average destroys the safety of the whole operation. Occasionally a permanently advancing market is met with and a big profit secured. In such an operation the original risk is small, the danger at no time great, and when successful the profit is large. This method should only be employed when an important advance or decline is expected, and with a moderate capital can be undertaken with comparative safety.

2. To "buy down" requires a long purse and a strong nerve, and ruin often overtakes those who have both nerve and money. The stronger the nerve the more probability of staying too long. There is, however, a class of successful operators who "buy down" and hold on. They deal in relatively small amounts. Entering the market prudently with the determination of holding on for a long period, they are not disturbed by its fluctuations. They are men of good judgment, who buy in times of depression to hold for a general revival of business—an investing rather than a speculating class.

3. In all ordinary circumstances my advice would be to buy at once an amount that is within the proper limits of capital, etc., selling out at a loss or profit, according to judgment, being careful always to stop losses and let profits run. If small profits are taken, then small losses should be taken. Not to have the courage to accept a loss and to be too eager to take a profit, is fatal. It is the ruin of many.

4. Public opinion is not to be ignored. A strong speculative current is for the time being overwhelming, and should be closely watched. The rule is, to act cautiously with public opinion, against it, boldly. To so go with the market even when the basis is a good one, is dangerous. It may at any time turn and rend you. Every speculator knows the danger of too much "company." It is equally necessary to exercise caution in going against the market. This caution should be continued to the point of wavering—of loss of confidence—when the market should be boldly encountered to the full extent of strength, nerve and capital. The market has a pulse, on which the hand of the operator should be placed as that of the physician on the wrist of the patient. This pulse-beat must be the guide when and how to act.

5. Quiet, weak markets are good markets to sell. They ordinarily develop into declining markets. But when a market has gone through the stages of quiet and weak to active and declining, then on to semi-panic or panic, it should be bought freely. When, vice versa, a quiet and firm market develops into activity and strength, then into excitement, it should be sold with great confidence.

6. In forming an opinion of the market the element of chance ought not to be omitted. There is a doctrine of chances—Napoleon, in his campaigns, allowed a margin for chances—for the accidents that come in to destroy or modify the best calculation. Calculation must measure the incalculable. In the "reproof of chance lies the true proof of men."

7. It is better to act on general than special information (it is not so misleading.) General information includes the state of the country, the condition of the crops, manufactures, etc. Statistics are valuable, but they must be kept subordinate to a comprehensive view of the whole situation. Those who confine themselves too closely to statistics are poor guides. "There is nothing," said Canning, "so fallacious as facts except figures."

8. "When in doubt do nothing." Don't enter the market on half conviction; wait till the convictions are fully matured.

9. I have written to little purpose unless I have left the impression that the fundamental principle that lies at the base of all speculation is this: Act so as to keep the mind clear, its judgment trustworthy. A reserve force should therefore be maintained and kept for supreme moments, when the full strength of the whole man should be put on the stroke delivered.

Notes On Office Trading

VI—The Rationale of Market Study

IN a previous "Note" I suggested that the Office Trader might and should pass through a more or less definite course of training, consisting of (a) Study, (b) Experiment, and (c) Practice. This is what necessarily happens in the case of people entering the other technical professions. Office trading is, perhaps, as highly technical as any, although it may not be feasible as yet to establish colleges, arrange a regular curriculum of studies, and turn out graduates as Doctors of Office Trading!

Office traders certainly do have to study, experiment, and practice in order to learn their business, but in most cases it is done unmethodically and with altogether too much expenditure of time, money and grey matter. Some of this loss is doubtless unavoidable, but a good deal might be saved if the would-be trader took the trouble to learn something about the market before risking any money at all.

The course of study here to be suggested is twofold. In the first place comes that which is mainly historical and has for its object an acquaintance with the general course of the market over a period of years, leading naturally to a definite knowledge of its present relative position. Moreover, the trader needs to remember that, although his primary concern is with the details of the smaller swings, he must not lose sight of the larger moves to which these swings are merely incidental.

At the beginning of the study he will devote himself to acquiring records of the broad historical facts of the market. Concurrently with laying the foundation (by observation of the market in action and accumulation of detailed daily data) for the more specialized succeeding stage, viz., the study and critical discussion of the technical situation. These two aspects of market knowledge cannot profitably be studied in inverse order, any more than could a physician study pathology to advantage before he had mastered normal anatomy and physiology.

The fundamentals of market knowledge here referred to are important parts of the equipment of all operators alike. Later on, when we come to the discussion of trading methods *per se,* it will be seen how inevitably each trader must ultimately become a specialist.

In the study of market history it will be necessary to descend from the general to the particular. Having a clear idea of the position of the market as a whole relative to its past swings, it will be in order to observe and consider the position of the individual stocks which compose it.

The Dow-Jones averages are published in "line chart" form on a sheet ("Twenty-five Years in the Stock Market") which covers the years 1885 to 1910, and shows all the important swings and their dates of culmination. These data should be re-plotted so as to show the element of time. A suitable scale would be eight or ten squares to the inch, using one horizontal space to a month and one vertical space to a point. This chart would be sufficient up to 1909, when the last big upswing culminated.

Beginning with early in 1909 the regular weekly form of this chart should be started, from which the "long range" chart could be continued without trouble by inserting the swings as they culminate.

The ten-stock "barometer" should also be started at the same date, and it would be well also to begin the individual charts. Both of these in weekly form, of course.

These charts will show how the culmination of the 1907-1909 Bull Campaign was managed.

The data for my weekly charts are collected in an oblong book, much after the style of a trial-balance book, arranged as shown in the accompanying table.

	LEHIGH.				CENTRAL.			
1912	Div.	High.	Low.	Vol.	Div.	High.	Low.	Vol.
M., Sept. 16	...	168.2	166.6	4	...	114.3	113.6	0.8
T., " 17	...	169.0	167.2	7	...	115.2	114.3	1
W., " 18	...	169.6	168.6	8	...	115.4	115.2	1
T., " 19	...	169.4	169.0	7	...	115.5	115.2	0.8
F., " 20	...	170.7	169.0	15	1¼	115.0	114.4	1
S., " 21	...	172.5	170.5	16	1	115.6	115.2	1
				57				5.6

The weekly highs and lows are underscored. The column headed "dividend" is important. For example, Central at 115¾ ex. div. on September 21 was really selling at the equivalent of 116¾ for the purpose of my charts, and its effective range for the week was three (and not two) points. In the same way No. Pac. sold down to 118¼ on July 13, but there was ¾ point dividend to be added. So the real low for the week was 119, i. e., only 1¼ points lower than the low of the previous week, which was 120¼.

The true significance of much of the detail of these charts will only become apparent later. It may be worth while to point out the emphasis which they lend to the argument that office trading and "fundamental conditions" are not blood relations. For example, from June, 1900, to November, 1907 (which includes the panics of 1901 and of 1907), a period of seven years, there were, at the most, but four changes of fundamental conditions. But from a trader's point of view there were at least eighty distinct changes of trend of varying duration, and probably at least five hundred "trading swings!"

The compilation of the above mentioned charts should be done in spare time. Concurrently therewith the trader should spend the whole of every market day in his broker's office, watching the market and compiling the various daily charts described in the previous Note. These must be kept strictly up to date just as if he were actually trading and studied as if his next day's dinner depended upon it.

Over and above this, however, and more important still, is the necessity of learning to "read the market." It is difficult to describe this mental process clearly, although old traders understand the expression well enough. Perhaps it may be defined as detecting its varying "temper" and noting every fleeting indication of its "technical position." These terms are used in the sense, respectively, of the apparent state of trading feeling towards the market, in whole or in part, and of the existing stage of the manipulative campaign.

A swing into new price territory is the issue of a carefully prepared technical condition—except, of course, when some accident, such as the San Francisco earthquake, occurs, taking all alike unawares. In other words, there has been more or less extensive accumulation or distribution by "the right people." This may not always have been intentional on their part, but its effect on subsequent prices will be the same.

It has been well said that the market as a whole is not chartable. But I am convinced that a trader, who is posted on the general course of the past market campaigns and who has the daily record of price and volume of, say, forty active representative stocks before him and will accustom himself to analyze them comparatively, and at the same time applies a modicum of common sense to the action of the market, will be able to "sense" the probable intentions of the powers that be, more often than not.

The half point line charts of Union, Steel and Reading should be kept, although no actual trading is being done. At this stage these are to be studied for the purpose of understanding the relation between the incidental "fluctuations" and the "trend." In the same way much will be learned about the individual characteristics of the stocks.

Above all things, let the student confine his attention to facts, market facts, which are a series of transactions, each one involving a price and a quantity. By

suitable correlation of the data derived from these facts he will arrive at an opinion of some kind, a guess, based upon the critical discussion of their sequence and time distribution. It will be his own guess, and must be, if it is to be worth while. "The only dope that is worth anything is the dope the trader dopes out for himself."

It does not seem possible to specify the exact things to be noted nor to lay down any rule as to the amount of purely abstract market study that is desirable. Certainly, several months must be devoted to such observational work before any one could be said to know much about the state of the market, even if he possess the genius of a Harriman. Perhaps the best idea of the object and possibilities of such studies would be obtained by a careful re-reading of "Studies in Tape Reading," "Studies in Stock Speculation" and "The Psychology of the Stock Market."* From them it should be possible to obtain an insight into the kind of facts that are likely to be of value and an idea of the mental attitude to adopt.

These remarks are necessarily very general, but, it is hoped, more or less suggestive. In the succeeding "Notes" we shall approach nearer to points of actual trading, and it will be possible to be more definite.—B.

(To be continued.)

* "Studies in Tape Reading" and "The Psychology of the Stock Market" are obtainable in book form, having been reprinted by the Ticker Publishing Company from previous issues of The Magazine of Wall Street.

The Law of Averages and the Stock Market

IV—The Diagonal Rule—Accumulation and Distribution—Size of Speculative Swings

By F. A. GIFFIN, M. A.

[In this series of articles Mr. Giffin, who is a well-known research engineer, shows that "manipulation," so called, has but small part in the making of stock prices, and that the movements of the market correspond very closely with the scientific laws of probability.]

IT is a matter of common observation among the brotherhood of chart fiends that price movements follow closely the direction of a diagonal line, started at the high or low point of the previous swing and continued, at an angle of 45 degs., in the trend direction of the new swing. So far as we have been able to learn from inquiry the explanation of this peculiarity seems to be shrouded in mystery, although many believe secretly that it is in some way associated with the dark and devious ways of the arch manipulator and consequently affords a clue as to how far "they" are going to put prices up or down.

Our theory furnishes a less romantic explanation of this "diagonal" formation. Owing to the special method of constructing the unit chart it frequently happens that two fluctuations may be entered in the same column of the cross-section paper. As a result of this duplication there will be, on an average, about two columns (i. e. horizontal squares) of the chart to every three fluctuations.

In order to deal with concrete integral numbers, let us suppose that the number of fluctuations in a given swing is some odd number that is a multiple of three, say 21. Then it would take two-thirds of 21, or 14, horizontal squares of the paper to record the swing.

Now 11 of the 21 fluctuations will be in the trend direction, and altogether should be composed of $11 \times 2.64 = 29$

units; whereas the 10' counter-trend fluctuations should be made up of 10 × 1.61 = 16 units. Since the swing is composed of 29 units in the trend direction, and 16 units in the counter-trend direction, the net price change would be 29 minus 16, namely 13 units.

But 13 units, net, means 13 vertical squares above (or below) the starting point. It thus appears that such a swing of 21 fluctuations would, under average conditions, occupy an area of cross-section paper 14 squares broad and 14 squares high. Presto, the "Diagonal Rule!"

We believe that the frequency with which individual swings follow this diagonal formation will occasion considerable surprise to anyone who will take the trouble to investigate for himself. For it shows that the theory of chance and probability can be applied to a much smaller group of fluctuations than one would suppose. In practice we frequently find a very close agreement between theory and experience among less than 50 fluctuations!

ZONES OF ACCUMULATION AND DISTRIBUTION.

Every tyro in Wall Street prophecy lays stress upon those periods of trading when stocks mark time by fluctuating within narrow limits. At such times he pores over his charts and sagely concludes that this is a sure sign of accumulation—or, as others think, distribution. The spinx-like riddle is "Which?"

While steel was thus "banking" last October, prior to its sudden break to 50, an ardent chart devotee and heavy trader called our attention to the remarkable "accumulation" that was shown by his charts. We asked (merely to be contrary—not because we possessed better insight) how he knew it was not "distribution" and he answered irrefutably "because." Next week the stock slumped violently, and the news slips printed, "Blank, Blank & Co. sold 20,000 Steel!"

Since 84.4 per cent. of all fluctuations are smaller than 4 units in size, it need occasion no surprise that one should every now and then pass through periods in which no large fluctuations occur. Instead of charging this state of quiescence to manipulation, it would appear to be much more natural to see in it a state of equilibrium in which public opinion is, on balance, pretty well satisfied with the existing level of prices. We do not claim that there is no accumulation, distribution, or manipulation in a "See-saw" market, but merely assert that there is not nearly so much of this as is generally belived.

That a long horizontal row of fluctuations generally presages an extensive move in one direction or the other, however, can not be gainsaid. For, according to the law of averages as exemplified in the Diagonal Rule, there must be in the long run about as many vertical squares during a swing as there are horizontal. It is even frequently possible to predict how much further the price swing should go, by merely counting the excess of horizontal over vertical squares to date. Nevertheless the rule fails just often enough to make it an exceedingly treacherous guide for trading.

While on the subject we direct attention to another deep-rooted chart fallacy. It is said that when prices make a new high, or a new low, that stocks have broken into new ground, and will consequently proceed much further in the same direction before any considerable change of trend takes place. A moment's reflection will show that this "rule" is also very uncertain, for stocks *always* make a record high, or low, just before the trend reverses, and the distance by which the latest high, or low, exceeds the previous one is anything but a constant or predeterminable quantity. We have seen a prominent Wall Street publication "eat its own prophecies," that were based on this "New high and low" theory, several times during the present year.

After investigating many claims to the contrary, *we have yet to learn of one single respect in which it is safe to rely upon charts that show price movements only,* for guidance as to the direction, duration, or magnitude of any individual swing. As a foundation for statistical studies, and a general guide to scientific methods of trading, however, the chart has a very great and legitimate field of usefulness.

STOP ORDER CHARTS.

This opens up a very broad field of inquiry and the best we can do here, perhaps, is to present the results for the simplest among the many forms that are possible—namely the 2-unit, half-point, stop order chart. In this, each fluctuation is some multiple of a half-point, and the smallest recognized fluctuation consists of two such units.

The omission of all one-unit fluctuations so reduces the number of recorded fluctuations in a speculative swing that it will be sufficiently accurate to regard each fluctuation of the stop order chart as a complete swing in itself. In other words all fluctuations of a stop order chart may be regarded as "trend fluctuations." This greatly simplifies their theory.

Now a fluctuation in one direction does not end, in this instance, until the price has moved two consecutive units in the opposite direction. Having been thus once begun by two units it will continue to grow so long as unit after unit is added without any reaction of two or more units. According to theory, the chance that the price will continue one unit further in the direction in which it has been moving, before reacting two or more units in the opposite direction, is .714. And conversely the chance of a reaction of two or more units, i. e., that the fluctuation will terminate, at any time is 1 minus .714 = .286.

Consider 10,000 newly begun fluctuations, each consisting of the initial two units. 71.4 per cent. of these will continue at least one unit further in the same direction, while the remaining 28.6 per cent., or 2,860, will terminate abruptly. In other words, 2,860 of the 10,000 fluctuations of all sizes will contain just two units, while the remainder, 7,140 will consist of more than two units. Likewise, of these 7,140, 71.4 per cent., or 5,098, will be larger than three units; while the remainder, or 2,042, will contain exactly three units. Similarly the number of fluctuations that contain exactly 4 units will be 1,458, etc.; up to 70 that contain 13 units, and 176 that are larger than 13 units.

The following table, like Table I, compares the calculated classification, with the numbers actually counted and reduced to a percentage basis:

Table II.—Classification of 2-Unit-Stop-Order Chart Fluctuations.

Size of Fluctuation (Units)	No. of Fluctuations Calculated	Counted	% Error
1	None	None	——
2	2860	2980	+ 4.2
3	2042	2002	— 2.0
4	1458	1648	+ 13.0
5	1041	1005	— 3.5
6	743	702	— 5.5
7	531	560	+ 5.5
8	379	244	— 35.6
9	271	254	— 6.3
10	193	173	— 10.4
11	138	61	— 55.8
12	98	97	— 1.0
13	70	81	+ 15.7
Greater than 13	176	193	+ 9.7
Totals	10,000	10,000	

The actual number of fluctuations counted on such a chart of Union Pacific, for the before-mentioned 20-month period, was 983; whereas, according to theory, there should have been 960. Here again the remarkably close agreement between theory and experience is a beautiful confirmation of the underlying soundness of the former.

SIZE OF SPECULATIVE SWINGS.

Referring to the definition of a Speculative Swing, given on page 356, October MAGAZINE OF WALL STREET, it will be seen that a chart showing nothing but 5-unit-stop-order chart. Consequently, by a process of reasoning like that in the preceding section, it becomes a comparatively simple matter to calculate the relative proportions in which swings of any specified size should occur, over a long period of time. Instead of .714, however, the chance that any swing will continue one unit further, before the trend reverses, should be taken as .846.

During the 20 months while we had Union Pacific under observation, there were actually 210 Speculative Swings containing five or more half-point units. We should expect 84.6 per cent. of these, or 178, to contain more than 5 units; and the balance, 32, to consist of exactly 5 units. There is no need of again going over the process of calculation; but Table III, following, shows the results—both computed and counted:

Table III.—Classification of Speculative Swings.

Size of Swing (Units)	Number of Swings Calculated	Counted
1	None	None
2	"	"
3	"	"
4	"	"
5	32	36
6	27	27
7	23	27
8	20	7
9	17	14
10	14	15
11	12	17
12	10	10
13	9	3
14	7	11
15	6	8
16	5	0
17	4	9
18	4	4
19	3	2
20	3	3
21	2	2
22	2	3
23	2	2
24	1	2
25	1	1
Greater than 25	6	7
Totals	210	210

Owing to the small number of actual swings available for a comparison with theory, the agreement is not so close as might be desired; yet we regard the results in this table as the most important of any yet presented. They show that the Speculative Swings, as well as the Chance Fluctuations, are assorted in size according to the law of chance and probability.

We are tempted to take a final bold step and state that the size and number of even the Primary Movements themselves—periods of prosperity and depression—might be found to distribute themselves according to the laws of chance and probability; but it would require several centuries to verify this experimentally!

CHART SCALES.

All charts of the same type, that have an equal number of fluctuations, look alike. But the actual period of time, and range in price, that they cover, vary greatly with the size of unit selected as a basis for constructing the chart. Everyone knows that a chart upon which each fluctuation of an eighth of a point is recorded will be much more voluminous than one, for instance, upon which the smallest recognized fluctuation is 2 points. It is possible to calculate the exact manner in which the size of the unit selected influences the size of the chart, and the subject is of immense practical value in studying the subject of manipulation.

It can be shown that the effect of halving the size of the unit is to multiply the number of fluctuations by 3.84. The *one-point* chart of Union Pacific for 20 months, for instance, shows 760 fluctuations. According to theory then there should have been $3.84 \times 760 = 2{,}918$ fluctuations on the *half-point* unit chart of the same period. As a matter of fact the number was 2,868, an error of only 1.7 per cent.

Since the number of horizontal squares of cross-section paper is always about two-thirds of the total number of fluctuations, we should expect that the *length* of a chart would vary with the size of the unit selected, in the same ratio as do the number of fluctuations; and such is actually the case.

We have already seen that there are, on an average, 2.17 units to a fluctuation on any unit chart. We should therefore expect to find $2.17 \times 760 = 1{,}639$ units on our one-point chart, and $2.17 \times 2{,}868 = 6{,}224$ units on the half-point chart. The actual counts gave 1,650, and 6.180, respectively, so that the error here is less than 1 per cent.

Reading the Market

EVERY speculator, every large investor, every man engaged in big business even though he never buys or sells stocks, should know how to "read the market," which means

a.—Reading "the signs of the times" in all parts of the world; and

b.—Reading the special conditions of the local situation.

Reading the "Tape."—Reading the market

means something more than reading the stock tape; though there are Wall Street men who become so expert in reading the tape that the varying and rapid changes in prices there recorded mean much more to them than to others, and they become so sensitive to the tape as to be able intuitively to feel what is going to happen before it takes place; but these men, so sensitive to market changes of an hour or a day, may be entirely lacking in ability to grasp the complicated and world-wide conditions which combine to make a business situation of a year or five years. The man who tests everything by the tape is one who examines phenomena through a microscope; while one who investigates international economic and political conditions is like one who looks through a telescope.

The business man, and especially one whose interests are affected by the security markets, must of necessity have a wide vision, for the cable, the telegraph, the railroad and the ocean steamer have brought the uttermost parts of the world so close together that the state of the market in New York may depend upon an event in Africa, a famine in India, a revolution in China, a short crop in Argentina, a speech in the English Parliament, a murder trial in Los Angeles, an editorial in a weekly paper in Philadelphia, or an election in Canada.

Anyone engaged in business, therefore, whether in Wall Street, or out of it, but especially if he is engaged in the stock-market, must understand how to read the signs of the times and, after bringing together the various facts obtained from every part of the earth, be able to form a fairly accurate judgment as to the course of the market. In so far as he is able to do this, he is able to reduce the risks of business; in so far as he fails, he is dependent upon chance like a mere gambler.

But, in addition to all this, the stock speculator must study the stock-market itself so as to inform himself as fully as he can as to its condition: whether there is an over-supply of stocks on hand ready to be sold, or a big short interest; what certain influential "interests" or heavy operators are doing; whether the supply of money for speculative purpose is, or is not, to be ample; in other words, the whole technical position of the market.

Price Movements.—Much may also be learned to practical advantage by studying the price movements of stocks, grain and cotton. As nature is accustomed to repeat herself, although never exactly alike, so the market is accustomed every few years to repeat former experiences, although never in precisely the same way. The student of the market may often by studying prices be able to distinguish signs of market repetition.

"Reading the market," therefore, requires scientific knowledge combined with the art to apply this knowledge practically so as to achieve results.

The speculator who does all this can not justly be termed "a gambler." He is a close and intelligent student of risks.—*From "The Work of Wall Street," by Sereno S. Pratt.*

How Bulls and Bears Are Made

Fable of the Soup Trust President and How His Presence Affects the Market

SCENE: A well-known brokerage house.
Time. 10:30 a. m.
Place. New York City.

Board member is called from the Exchange to speak to President Jones of the Soup Trust. The two are seen to be earnestly conversing together for a few moments and other people in the office strive to overhear the conversation without success. The broker then goes back to the Board and Mr. Jones leaves. In a few minutes the office manager (who thinks he is wise) gets the telephone clerk on the wire and asks if their Board member has traded in any Soup shares.

"Yes he has just bought 300 preferred at 23½."

Office manager rings up a couple of friends and advises purchase of Soup preferred and gets orders for 300 shares, to this the manager adds 100 for his personal account.

The telephone clerk after all this buys himself 50 shares and tells the margin clerk, who in turn takes the welcome news that the President of the Soup Trust has just been in the office and has predicted a rise of 25 points in Soup preferred. A pool is rapidly made up with the result that another brokerage house gets an order to buy 200 Soup preferred. The Cashier buys himself 100 and by this time the office manager had imparted the information to several clients in the office and altogether 1,000 shares have been purchased in the office. The President of the Soup Trust sees the inactive preferred shares quite active and on finding out where the buying is coming from, he wonders if his friend the Board member with whom he has been making a date to play golf that afternoon has decided that he was bullish on Soup preferred. In consequence the stock closed at 21 that afternoon. (Curtain.) —*Wall Street Journal.*

INQUIRIES

This department is to answer miscellaneous questions in regard to the science of investment, methods of operating, the customs of the markets, etc. It is intended for the use of subscribers only. Please write questions briefly and, if personal reply is desired, enclose stamped and self-addressed envelope. Address INQUIRY DEPARTMENT.

Distillers Earnings.

G. D.—The Distillers Securities Corporation has only one class of stock. The earnings applicable on this stock for the fiscal year 1911 amounted to 3.1% on par. This equals 9.1% on a price of 34.

Weekly Bank Clearings.

Will you please let me know where I can obtain the bank clearings of the United States by weeks—what publication prints them?—N. D.

A convenient publication to give you the weekly bank clearings is the Saturday edition of the New York *Evening Post.* Another would be *Bradstreet's Weekly,* or the *Commercial and Financial Chronicle.*

"A Sign of Bull Moves."

I have a copy of your book "Fourteen Methods of Operating in the Stock Market" and in a chapter "A Sign of Bull Moves" by F. H. Tubbs, paragraph at top of page 104, he speaks about the average daily fluctuation of ten stocks and explains that the average is the difference of the sums of the highs and lows. Now, the real average would be this difference divided by ten. Which does he mean?—J. B.

The meaning on the page referred to is the difference between the averages of the highs and of the lows. That is, the sums would be divided by ten, as you say.

Albany & Susquehanna Conv. 4s.

I note that Delaware & Hudson 10-year conv. deb. 4's are quoted at 98⅛ and are due 1916, and can be exchanged for Delaware & Hudson stock, which is now selling for $172. Please advise if this is correct.—T. S.

You probably refer to Albany & Susquehanna convertible 4's which are part of the Delaware & Hudson system. These are convertible into Delaware & Hudson stock at the rate of $500 of the stock for $1,000 of the bonds. Hence there would be no advantage in buying the bonds for the conversion feature at present, but there is a distinct advantage in purchasing them as an investment with the idea of converting them should Delaware & Hudson stock sell at a price which is more than double that paid for the bonds. With the stock at 172 the conversion privilege is only worth 86, but the bonds sell close to par on account of their solid investment qualities.

Research Engineers—Bond Salesmen.

I would like information regarding the duties of a research engineer, also what course to pursue in order to become a bond salesman.—R. T.

Research engineers are employed to study engineering possibilities with a view to promotion, or to make a careful examination of the condition of railroad or industrial companies which are already in operation. The number employed by investment houses is not large.

In regard to becoming a bond salesman, we suggest that you communicate with Mr. Roger W. Babson, Wellesley Hills, Mass. If you will mention this magazine, we think he will be pleased to give you full information.

Errors in Quotations.

L. J.—We do not know of any newspaper which is exempt from typographical errors in reporting stock market quotations. All the papers we have ever seen make such errors from time to time. If you find such errors interfering with your work, we would suggest that you take two or three papers, so that when one makes an error you can get the correct figure from another. We find the *Evening Sun,* the *Wall Street Journal* and the *New York Times* as good as any papers for this purpose.

A Convenient Price Record.

In your September issue you publish an article signed by "Germany" on "Methods of Successful Traders." On page 288 "Germany" says: "To get the actual trend I use paper with four vertical lines for each day: (1) Opening; (2) and (3) High and Low, or Low and High, according as most highs or lows are made first; (4) Close. Please explain and illustrate this.—W. F.

The meaning of the passage you quote is as follows: Paper ruled in small squares is obtained and four of the vertical lines are used for each stock market session. The horizontal lines represent prices, one, two, or four lines to the point as desired, and according to the distance between the lines.

On the first of the four vertical lines used for each session, a dot is made at the price representing the opening. Of course, this might be for one stock alone or for an average of several stocks, just as preferred. On the second vertical line, a dot is made at the high point of prices for the day, provided the high point is reached first; or at the low point

for the day if the low point is reached first. On the third vertical line, the high or low price is marked, depending on whether the low or high has been previously taken for the second vertical line. On the fourth vertical line is marked the closing price. Then these four dots are connected by straight lines so as to show the general movement of prices for the day.

This is a convenient method of recording prices. Of course, you understand that it is no patent scheme to tell which way the market is going.

Southern Ry. Bond Discounts.

Your "Bargain Indicator" shows Southern Ry. to have earned on common stock in 1910, 2.3%, and in 1911, 3.1%. Will you kindly advise if this allows for the deduction of "bond discount" each year or not? So. Ry. 4's have been sold at a considerable discount, and conservative bookkeeping would require that this discount be deducted from the earnings each year.—B. T.

Southern Railway charges the greater part of the discount on bonds sold to profit and loss, and only a small part to income account. For example, in 1910, when this item amounted to over $3,000,000, the sum charged to income account was $266,806, and that charged to profit and loss $2,831,459. The earnings as given in the "Bargain Indicator" are computed from the income account as given by the company itself.

Execution of Order.

September 12 at 11.44 New York time I instructed a Cincinnati broker to buy 100 Reading at 165¾. This price was subsequently exactly reached as that day's low, but broker claimed purchase was not made, as but one lot, 2,500 shares, was sold at 165¾. However, the *Wall Street Journal* of September 13 showed three lots, 800, 200 and 2,500, sold at 165¾, from 12.45 to 1.45. Are the three lots of 800, 200 and 2,500 shares, respectively, three separate and complete transactions, or the totals of various transactions at 165¾? Would the records of the New York Stock Exchange show to which New York broker or Exchange member the sales were made?—J. H.

It is impossible for us to tell whether you were legitimately entitled to the purchase at 165¾ or not. This figure was the lowest of the day, and it may easily have been that the total of 3,500 shares at that price were sold under circumstances which made it impossible for your broker to execute the order. Suppose there were 10,000 shares wanted at that figure and only 3,500 shares sold. The would-be purchasers of the remaining 6,500 would be disappointed.

Your broker was evidently mistaken in saying that only 2,500 shares were sold, as the record in the *Wall Street Journal* is generally reliable. In these printed records, all sales at a single price are grouped; that is, a 500, 200 and 100 share lot would be grouped as 800, if all at the same price.

The only Stock Exchange records which show which brokers bought and sold are those of the Stock Exchange Clearing House, but no outsider has access to these.

Money Rates—Bargain Indicator.

I do not quite understand the difference between "time money rates" and "commercial paper rates." Which do you use in judging time money where you say in September, 1912, page 300, "The climax of a bull movement is usually indicated in a rough way by an advance of 2% in the rate for prime commercial paper within a period of about six months," etc? Which of these do you use in "Essential Statistics Boiled Down" under heading "Average Money Rate Prime Commercial Paper, New York"? How is this average made up? What length of time do you take? Which of these does Henry Hall take in computing time money rates in his book "How Money is Made in Security Investments"?

What is the gold import and export point? In judging a stock from your Bargain Indicator, do you use "Earnings on Par" or "Earnings on Price"? Do Consolidated Exchange houses split commissions with outside representatives? Do put and call dealers pay commissions on business secured for them?—J. P.

Quotations on time money refer to loans on stock exchange collateral. Quotations on commercial paper refer to notes issued by business men or corporations. In "Essential Statistics" we quote the rate for commercial paper, and that is referred to in the sentence you quote from the "Outlook." The average given in "Essential Statistics" is made up by a rough examination of the rates during the month. The changes are not usually great enough to make it necessary to work out the average by an exact process of arithmetic. The maturity of the commercial paper for which we quote rates is six months. Henry Hall, in computing time money rates, uses the rates on stock exchange collateral from four to six months.

The gold import point is usually given as 4.833 for demand exchange, and the export point about 4.884. These figures vary with the condition of the money market. They refer to the rate given under the heading "cable and sight rates" as demand sterling.

In judging a stock from the "Bargain Indicator," you should consider its earnings for the entire period shown; whether they are increasing or decreasing, year by year; whether they are maintained steadily or fluctuate widely, from year to year; and the earnings on the price, not only as related to the last fiscal year, but as related to average earnings on par for the last five or six years. The main purpose of the "Bargain Indicator" is to give you, in a brief form, a comprehensive view of the earnings on the stocks for half a dozen years. Of course, purchases would not be made on the strength of the position of the stock in the "Bargain Indicator" aside from other considerations.

We believe the members of the Consolidated Stock Exchange do split commissions with

brokers in outside cities. Brokers in puts and calls, as they are not members of any organized body, would use their own pleasure about paying a commission for new business.

Transfer of Stock Certificates.

When purchasing stocks outright does the broker forward certificate to transfer office and then send me new certificate made out in my name or do I forward original certificate to transfer office to have another made out in my name? When selling a certificate which is made out in my name do I fill in my name or just "I" in this space: "for value received .... hereby sell transfer," etc. Also, is it necessary for a witness to sign his name after "In presence of" or can the broker fill in this? Would it not be advisable to leave all this trouble to broker by letting him keep stock, or would you advise me to personally hold my stocks, which I purchase outright?—F. B.

In purchasing stocks outright, you are expected to pay for them in full either at the time the order is given or upon receiving notice of the purchase. Accompanying your check, there should be instructions to the broker as to just how you wish the certificate made out. This should include the first name in full, together with the address. The broker attends to all details of transfer and forwards certificate to you by registered mail. This is perfectly safe, as the certificate is not negotiable until it is properly signed on the back. When you sell this certificate, it is only necessary for you to sign your name on the lowest right hand line. Do not fill in anything after the words "hereby sell, transfer," etc. You can, however, have it witnessed and dated the day of execution.

If your broker is a member of the New York Stock Exchange or other reputable exchange, it may be more convenient for you to leave the certificate in his hands. He will collect all dividends and credit your account, and shipping the stock back and forth is thus obviated. However, you will find the latter operation simple enough after you have once done it, and, as a rule, it is best to lock the certificate up in your own safe deposit box. It represents so much property and should receive the same care as a will, a deed, or any other valuable part of your estate.

Readers frequently ask to be referred to responsible brokerage houses. In making such a request, please state what amount you have for investment, or in what sized lots you wish to deal. Also state what large city is located most conveniently to you, or if you have any preference in this regard.

We refer our readers only to such houses as we would consider safe custodians of our own funds, but of course can take no further responsibility.

The Figure Chart

The following figure chart completes the chart on page 108 of the July, 1910, Magazine of Wall Street, down to date given below. It is based on the daily average closing bid price of 20 standard railway stocks, and gives a general view of the course of the market since June, 1910.

Scale	June			July					Oct.			Feb.				June				Sept.			Nov.					Apr.							Oct.	
	22.			27.					18.			20,				7.				27.			23.					20,							5.	
	1910.											1911.																1912.								
124																																	4		4	
123																3	3	3															3	3	3	3
122															2	2	2	2										2					2	2	2	2
121															1			1									1	1	1	1			1	1		
120															0			0									0	0	0	0	0	0	0			
119	9*											9			9			9					9				9			9	9	9	9			
118	8	8							8			8	8	8	8			8				8	8	8			8					8				
117	7	7							7	7		7	7	7	7			7				7	7	7	7	7	7									
116	6	6							6	6		6	6					6	6			6		6	6	6	6									
115	5	5				5			5	5		5						5	5			5				5										
114		4				4	4		4	4	4	4							4	4	4	4														
113		3	3			3	3		3	3	3	3							3	3	3	3														
112		2	2	2		2	2	2	2	2										2	2															
111		1		1		1	1	1												1	1															
110				0	0	0														0																
109				9	9	9																														
108				8	8																															
107				7	7																															
106				6																																

*In order to condense the chart, only the last figure of each number is given. Thus 9 represents 119, etc.

Essential Statistics Boiled Down

THE figures below give a complete view of the financial and industrial situation, with the best available comparisons for the corresponding month (or nearest month obtainable) in each of the four preceding years.

	Average Money Rate Prime Commercial Paper New York.	Average Money Rate European Banks	Per Cent. Cash to Deposits, New York Clearing-house Banks.	Per Cent. Loans to Deposits, New York Clearing-house Banks.	Per Cent. Cash to Deposits, All National Banks.	Per Cent. Loans to Deposits, All National Banks.	Money in Circulation Per Capita First of Month.
October, 1912..........	6	3⅞	25.5	100.7	.....	.....	$34.42
September, 1912.......	5¾	3⅞	25.3	99.8	15.2	102.9	34.36
August, 1912..........	5¼	3½	26.2	97.4	.....	.....	34.31
October, 1911..........	4½	4⅛	25.9	98.5	16.3*	103.6*	34.35
" 1910..........	5¾	4⅛	25.7	102.1	16.5*	106.8*	34.88
" 1909..........	5⅜	4	25.9	99.9	17.0*	103.0*	34.96
" 1908..........	4½	3	27.5	94.3	19.1*	105.1*	35.04

*September.

	New Securities Listed N. Y. Stock Exchange (000 omitted)	Bank Clearings of U. S. (000 omitted)	Bank Clearings of U. S. Excluding N. Y. City. (000 omitted)	Balance of Gold Movements —Imports or Exports. (000 omitted)	Balance of Trade Imps. or Exports. (000 omitted)
September, 1912....	$47,735	$13,164,149	$5,731,313	....	Ex. 52,081
August, 1912.......	142,063	13,284,697	5,798,413	Im. 3,078	Ex. 12,864
September, 1911....	35,583	12,590,769	5,405,792	Im. 2,351	Ex. 70,627
" 1910....	71,824	11,395,370	5,164,355	Im. 1,370	Ex. 51,609
" 1909....	119,931	13,542,069	5,063,692	Ex. 5,195	Ex. 32,948
1908....	50,021	11,123,659	4,341,175	Im. 792	Ex. 40.899

	Gibson's Index Cost of Living.	Bradst's Index of Commodity Pcs.	English Index of Commodity Pcs.	Wholesale Price of Pig Iron.	Produc'n of Iron (Tons.) (000 o'td.)	Price of Copper (Cents).	U. S. Production of Copper (Lbs.) (000 o'td.)	U. S. St'l Co. Unfill. (000 o'td.) Tonnage.
October, 1912....	.....	9.45	2740	$17.75	.....	17.5	....	.....
September, 1912..	116.0	9.22	2722	16.93	2,463	17.5	140,089	6,551
August, 1912.....	115.7	9.16	2746	16.45	2,512	17.5	145,628	6,163
October, 1911....	112.5	8.81	2593	15.34	1,977*	12.2	115,588*	3,611*
" 1910....	111.6	8.92	2418	15.88	2,056*	12.5	119,000*	3,158*
" 1909....	111.8	8.74	2258	19.00	2,385*	12.7	118,000*	4,796*
" 1908....	106.0	8.01	2200	16.75	1,418*	13.3	....	3,422*

*September.

	Net Surplus of Idle Cars.	Building Operations, Twenty Cities.	Business Failures. Total Liabilities.	Crop Conditions. Spring Wheat.	Crop Conditions. Corn.	Crop Conditions. Cotton.	Babson's Average 10 Leading R. R. Bonds.
October, 1912..	31,579†	....	....	....	82.2	....	96.2
September, 1912	9,750	$36,827,818	$19,454,176	90.8	82.1	69.6	96.0
August, 1912...	56,510	52,038,639	15,532,530	90.4	80.0	74.8	96.7
October, 1911..	35,897	46,562,982*	14,412,902*	56.7*	70.4	71.1*	97.6
" 1910..	13,316	41,415,868*	16,039,712*	63.1*	80.3	65.9*	98.8
" 1909..	12,546	48,726,000*	9,670,329*	88.6*	73.8	58.5*	100.3
" 1908..	101,837	36,531,000*	17,658,523*	77.6*	77.8	69.7*	98.9

*September. †Shortage.

The Situation Summarized

[While an attempt is here made to divide the important factors into favorable and unfavorable, this classification is for convenience only. It should be fully recognized that the same factor may have a bullish effect in one direction and bearish in another, or may be bullish in its immediate influence, but containing dangerous possibilities for the future. Also, it would be impossible to strike a balance in this way, as one bullish factor might be so important as to outweigh all bearish considerations, or vice versa.]

Favorable

Crops. Frosts have held off and a bumper harvest has been gathered.

Bank clearings for September largest ever recorded for that month, with the exception of 1909. Bank clearings outside of New York City have broken all records for each month of 1912 so far. This indicates plainly the large volume of general business that is moving.

Iron and steel continue to advance in price and orders for forward business are still increasing. A recent feature has been the placing of large equipment and rail orders by the railroads. Stocks of pig iron now estimated the lowest for some years.

Copper. There has been a steady increase in United States production for four months past, and both the United States visible and the world's visible have grown some 20,000,000 pounds. However, visible supplies are not yet at a high figure. In fact, the world's visible is less than half the high record of April, 1911. The price is firmly maintained around 17½ cents. Production has been temporarily decreased as a result of labor troubles in Utah and Nevada.

Money. Treasury balance is large enough to permit considerable deposits in banks if found necessary. Over $8,000,000 gold has been imported. Continued firmness probable, without serious stringency.

Railroad net earnings are running larger than last year, but are not increasing in proportion to the gain in gross earnings. The Interstate Commerce Commission still declines to grant any important increases in rates. Nevertheless, the general situation is showing improvement with more active business conditions.

Bond market has shown a little better tone for high-grade issues, but without any important advance in prices.

Stock market shows a considerable awakening of public interest. Previous to the breaking out of the Balkan troubles a fair commission business was being done, but foreign uncertainties have operated to curtail new buying.

Unfavorable

Money still firm all over the country. Commercial paper at New York is 6 per cent. to 6¼ per cent.—a rate which has always tended to gradually draw capital away from Wall Street. Call loans have been a little easier recently, owing to extensive loaning here by interior banks.

All United States national banks combined report smallest reserves on record for this season of the year. This does not look like a good basis for any prolonged boom.

Foreign money rates. The general advance in the discount rates of European banks is due to the Balkan war, but it serves warning on this country that we cannot expect help from abroad in case of tight money here. The 5 per cent. rate of the Bank of England indicates that the situation is seriously regarded there.

Foreign government bonds continue very weak.

Business failures unpleasantly large. In view of big crops and general activity of business, this is a peculiar feature of the situation. It indicates that although a large volume of business is moving, profits are unsatisfactory. Several large failures have occurred in the automobile business, where the supply is at last catching up with the demand.

Building permits for September show a sharp decrease.

Car shortage threatens to become serious. It is already retarding the movement of crops to some extent.

Railroads need much additional capital. The supply continues small and relatively high interest returns are required in order to bring it out.

Labor unrest is still a somewhat menacing condition. Strikes are numerous all over the world. Board of Arbitration has postponed settlement of railroad engineers' demands until after election. Shortage of labor in some industries.

The Outlook

Some of the Factors Beneath the Surface of Current Events

By G. C. SELDEN

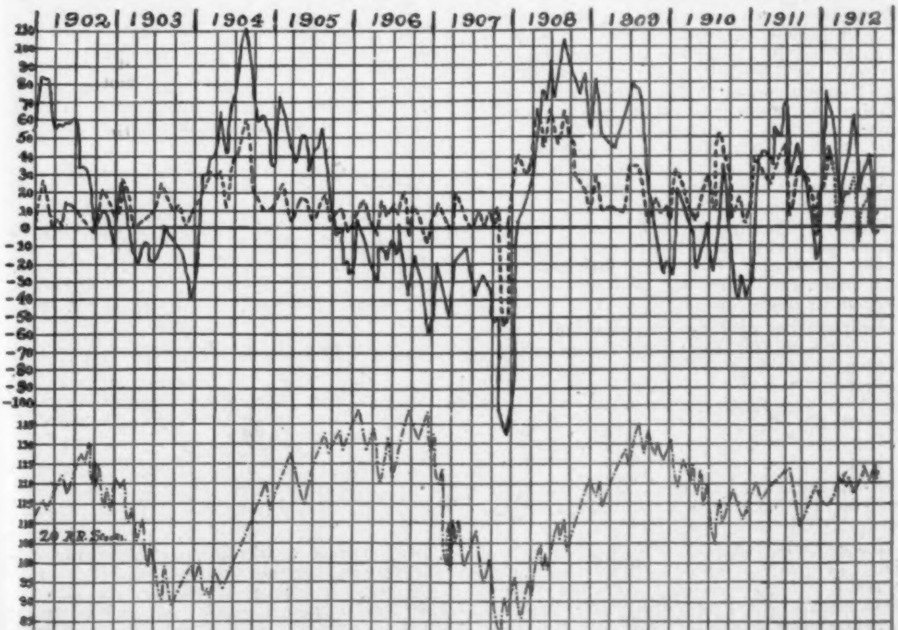
THE general course of railroad stocks for ten years is shown in chart form below. The last week given is that ending October 19, 1912.

The diagram also shows, in millions of dollars, the course of excess deposits and surplus reserves of New York clearinghouse banks (excluding the trust companies). The zero line represents equality of loans and deposits.

The change in the diagram since last month is comparatively slight. There has been a great reduction in both loans and deposits, but the proportion of the two accounts remains about the same. The reduction has been accomplished chiefly by the transfer of loans to banks and trust companies outside of New York City.

Condition of All National Banks. When all national banks in the United States are considered, deposits have kept well up to loans during the past two years. On September 4, the date of the last Comptroller's report, loans exceeded deposits by only 2.9 per cent., compared with an excess of 6.8 per cent. in September, 1910, and nearly 10 per cent. in September, 1907. This relatively contracted condition of credit in outside banks has permitted them to take over loans from New York banks, now that the rates for call and time loans have risen enough to make the operation a profitable one.

It will be remembered that this per cent. of loans to deposits for all national banks (as distinguished from the New York banks alone) shows fluctuations which are, in a general way, opposite to those of the stock market. When this per cent. is under 103, as in September, 1902, January, 1906, and September, 1909, prices of stocks have been relatively high; with the per cent. above 110, as in September, 1903, and December, 1907, prices of stocks have been low. Since the middle of 1910, this relation between loans and deposits of all national banks has remained comparatively stationary, but with a slight downward tendency of the per cent., just as the stock market has had a moderate upward tendency. The present figure of 102.9 would indicate, on



—— Excess Deposits. ------ Surplus Reserves. —.—.—.— Stock Averages.

the above basis, a rather high range of stock prices, but would, of course, leave room for a further advance with all other conditions favorable.

Politics. Indications are strong for Democratic success. Large sums of money are reported to be offered of 3 to 1 on Wilson against the field, and the current quotation is 4 to 1. In past elections such high odds have correctly indicated the winner.

Financial interests seem to be pretty well reconciled to this result. Public opinion, aroused by continued concentration of wealth in a few hands, forced both Taft and Roosevelt to take action antagonistic to the plans of big business interests during the past eight years. Taft, as the election approached, endeavored to make peace with the banking powers, but succeeded to a limited extent only. Roosevelt is championed by a small group who prefer regulation by national commissions to the uncertainties of the present situation. Wilson is an unknown quantity and has not really committed himself as to a definite policy. He has shown himself to be a very effective speaker and to have no small amount of practical political sagacity. The big interests have apparently concluded that his election is inevitable and they are hoping for the best—or at least what seems to them to be the best.

As illustrating the degree of foresight developed by careful study of conditions over a long period of time, it is interesting to note that Frank Crowell, author of "How to Forecast Business and Investment Conditions," predicted under date of November 26, 1910, in a written memorandum filed in this office, the great growth of "the Socialist or some new party" in 1912, and the election of a Democratic president.

Comparison of 1912 and 1905. Mr. Brookmire and others are calling attention to the fact that the conditions of 1912 are similar to those of 1905. In many respects the comparison is apt, especially in active metal markets, good crops, rising prices, large bank clearings, and the prevalence of business confidence. The fall of 1905 was followed by two years of very active general business. The stock market made its highest prices in January, 1906, reacted sharply, but again reached almost the same level in December, then declined steadily through 1907.

There are, however, a number of important differences in the situation which should not be lost sight of. For example, in September, 1905, the average price of ten leading bonds stood at 106.5, having advanced from a low point of 101.1 in the preceding year; in 1912 the average of the same bonds is 96.0, which is the low point for four years past. The price of standard bonds is a pretty good indication of the supply of capital for permanent investment, and in this particular we are not in nearly as strong a position as in 1905.

Again, in the fall of 1905 total liabilities of failures were running low, $7,550,000 for September; in 1912 failures are large, $19,454,000 for September, considerably the highest in that month for ten years.

In 1905 general prices, as shown by current index numbers, had advanced steadily for five years, and money in circulation *per capita* had increased along with them, from $27.98 in 1901 to $31.08 in 1905. In 1912, general prices have been rising even faster than in 1905, but money in circulation has shown no increase for five years—$35.04 in 1908 and $34.42 in 1912. Moreover the proportion of this money held idle in bank reserves is somewhat larger now than in 1908, so that there has really been a perceptible decline in genuine *per capita* circulation. Less cash in the hands of the people in comparison with prices of the things they must buy—that is the condition shown by these figures.

I draw a similar conclusion from the fact that per cent. of cash to deposits of all national banks is now only 15.2 per cent. against 17.4 per cent. in 1905.

We may note, however, in connection with the recent advance in European bank rates which has caused so much discussion, that foreign bank rates were about the same in the fall of 1905 as in 1912.

We are not in as strong a position for permanently prosperous business as we were in 1905. It seems to me useless to try to blink that fact. We may have, and probably shall have, a period of active business and general cheerfulness, but the fundamental basis for such a boom as that of 1906 and the first half of 1907 is lacking.

The Cause of the Difference. Our old friend, high-cost-of-living, is chiefly responsible for this difference in conditions between 1905 and 1912. Rising prices, also, have encouraged extravagance. The deepest underlying cause of high prices is gold depreciation through increased production, though the effect of this is so gradual that it can be observed only over long periods of time. On this point Byron W. Holt has some interesting things to say in a recent letter:

"Growing out of gold depreciation and rising prices for commodities are numerous effects that are disturbing security markets and political and social conditions. Thus, because of rising prices, interest rates have advanced while bond and income values have declined. Because of rising prices, wages and other costs of operation have advanced while the net earnings of railroads, street railways, etc., have either declined or increased but little. Because of rising prices, farm lands and mining and timber lands have increased enormously in value—to the benefit of the common stocks of railroad and industrial corporations owning much coal and ore lands, farm lands, city lots, etc. Because of rising prices, actual wages and salaries have declined and discontent, strikes, rebellions, third parties, increased taxes and increased indebtedness have resulted. Because of rising prices, great political overturns may be confidently predicted, in this and other countries, in the next few years. . . . . In our opinion gold depreciation is not only the fundamental cause of many pending political changes but it also furnishes the key to many important stock market changes that are under way."